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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5151	18161	31041	0.97	6.9E-02	AA670288.1	EST_HUMAN	af25e08.s1 Soares fetal_fetus Nb2H-F8 9w Homo sapiens cDNA clone IMAGE:1032710 3'
6028	19109		0.57	6.9E-02	AF161384.1	NT	Homo sapiens HSPC101 mRNA, partial cds
7878	20820		0.87	6.9E-02	AF164967.1	NT	Caroline distemper virus strain A75/17, complete genome
8387	21356		1.18	6.9E-02	U12022.1	NT	Human calmodulin (CALM1) gene, exons 2,3,4,5 and 6, and complete cds
8699	21865	35287	1.08	6.9E-02	BE567435.1	EST_HUMAN	601340861F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3683030 5'
8899	21865	35288	1.08	6.9E-02	BE567435.1	EST_HUMAN	601340861F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3683030 5'
9476	22439	36879	0.55	6.9E-02	U22867.1	NT	Barbarie duck parvovirus REP protein (rep) and three capsid protein VP (vp) genes, complete cds
12343	25141		2.17	6.9E-02	X74315.1	NT	Xlaevis XFD2 mRNA for fork head protein
12519	25250		1.75	6.9E-02	P44821	SWISSPROT	PROTEIN TRANSPORT PROTEIN HOFC HOMOLOG
13112	25631	31648	3.89	6.9E-02	BF362899.1	EST_HUMAN	IL3-HT0819-110700-210-C04 HT0819 Homo sapiens cDNA
1889	14924	27818	1.18	6.8E-02	AA498759.1	EST_HUMAN	ae30f02.f1 Gesslar Wilms tumor Homo sapiens cDNA clone IMAGE:897339 5' similar to gb:M22382
1889	14924	27819	1.18	6.8E-02	AA498759.1	EST_HUMAN	ae30f02.f1 Gesslar Wilms tumor Homo sapiens cDNA clone IMAGE:897339 5' similar to gb:M22382
1922	14946	27942	4.7	6.8E-02	AF156673.1	NT	MITOCHONDRIAL MATRIX PROTEIN P1 PRECURSOR (HUMAN);
3117	16174	29084	1.05	6.8E-02	AA781998.1	EST_HUMAN	Homo sapiens putative hepatic transcription factor (WBCSR14) gene, complete cds
3117	16174	29085	1.05	6.8E-02	AA781998.1	EST_HUMAN	af75a08.s1 Soares testis_NHT Homo sapiens cDNA clone 1376628 3'
3117	16174	29086	1.05	6.8E-02	AA781998.1	EST_HUMAN	af75a08.s1 Soares testis_NHT Homo sapiens cDNA clone 1376628 3'
4583	17805		0.71	6.8E-02	BE141076.1	EST_HUMAN	af75a08.s1 Soares testis_NHT Homo sapiens cDNA clone 1376628 3'
6283	18289		0.76	6.8E-02	T03013.1	EST_HUMAN	MR0-HT0069-071099-001-c05 HT0069 Homo sapiens cDNA
6776	19831		0.86	6.8E-02	P20792	SWISSPROT	FB20A6 Fetal brain, Stratiogene Homo sapiens cDNA clone FB20A6 3'end
7084	20018		1.05	6.8E-02	BE061890.1	EST_HUMAN	CELL-SURFACE RECEPTOR DAF-1 PRECURSOR
7497	20462	33822	7.18	6.8E-02	AL163288.2	NT	RG1-BT0254-090300-017-409 BT0254 Homo sapiens cDNA
7948	20889	34280	0.84	6.8E-02	U16856.1	NT	Homo sapiens chromosome 21 segment HS21C068
8631	21599	35020	5.44	6.8E-02	A1248287.1	NT	Dietostelium discoideum myosin heavy chain kinase A (MHCK A) mRNA, complete cds
8631	21599	35021	5.44	6.8E-02	A1248287.1	NT	Pyrococcus abyssi complete genome; segment 5/6
12140	25948		3.73	6.8E-02	T03214.1	EST_HUMAN	Pyrococcus abyssi complete genome; segment 5/6
12274	25094		2.52	6.8E-02	AA758014.1	EST_HUMAN	FB4A8 Fetal brain, Stratiogene Homo sapiens cDNA clone FB4A8 3'end similar to LINE-1
12832	25449		1.88	6.8E-02	AW975839.1	EST_HUMAN	af6705.s1 Soares testis_NHT Homo sapiens cDNA clone 1320705 3'
12894	25480		2.35	6.8E-02	8910585	NT	EST1367948 MAGE resequences, MAGEC Homo sapiens cDNA
1531	14564		1.93	6.7E-02	AF115538.1	NT	Mus musculus latent TGF beta binding protein (Tgfb), mRNA
1610	14934	27830	1.99	6.7E-02	A1220285.1	EST_HUMAN	Oncorhynchus mykiss TAP1 protein (OrnmyTAP1) mRNA, OrnmyTAP1'01 allele, complete cds
3730	16772	29683	4.34	6.7E-02	P17278	SWISSPROT	qg79e04.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1841406 3'
6183	21153	34560	1.01	6.7E-02	X62695.1	NT	HOMEOBOX PROTEIN HOXD4 (GHOX-A)
							H.sapiens DNA for cGMP phosphodiesterase (exons 4-22)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8183	21153	34561	1.01	6.7E-02	X62885.1	NT	H.sapiens DNA for cGMP phosphodiesterase (exons 4-22)
8781	21748	36170	0.45	6.7E-02	AW082888.1	EST_HUMAN	xb61c11.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2580788 3'
8859	22886	36347	0.73	6.7E-02	AW137359.1	EST_HUMAN	U-H-B11-act-g-01-O-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715433 3'
9959	22886	36348	0.73	6.7E-02	AW137359.1	EST_HUMAN	U-H-B11-act-g-01-O-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715433 3'
1371	14405	27376	0.9	6.6E-02	AF245118.1	NT	Drosophila melanogaster cactin mRNA, complete cds
2182	15207	28228	2.68	6.6E-02	AJ289241.1	NT	Mus musculus Capn12 gene for calpain 12, exons 1-21, three alternative transcripts
3477	16523	29447	11.07	6.6E-02	R64306.1	EST_HUMAN	y18b10.s1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:139579 3'
3491	16537	29462	2.1	6.6E-02	7108357	NT	Homo sapiens mesothelin (MSLN), transcript variant 1, mRNA
3491	16537	29463	2.1	6.6E-02	7108357	NT	Homo sapiens mesothelin (MSLN), transcript variant 1, mRNA
4107	17141	30036	1.45	6.6E-02	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
6016	18029	30913	9.23	6.6E-02	Q61703	SWISSPROT	INTER-ALPHA-TRYPsin INHIBITOR HEAVY CHAIN H2 PRECURSOR (ITI HEAVY CHAIN H2)
5015	18029	30914	9.23	6.6E-02	Q61703	SWISSPROT	INTER-ALPHA-TRYPsin INHIBITOR HEAVY CHAIN H2 PRECURSOR (ITI HEAVY CHAIN H2)
6736	19792	33073	3.97	6.6E-02	X06411.1	NT	P. vulgaris mRNA for chalcone synthase
6987	19823	33105	0.55	6.6E-02	P25159	SWISSPROT	MATERNAL EFFECT PROTEIN STAUFEN
6987	19823	33106	0.55	6.6E-02	P25159	SWISSPROT	MATERNAL EFFECT PROTEIN STAUFEN
8152	21080		0.57	6.6E-02	D14567.1	NT	Penicillium urticae mitochondrial rRNA (large rRNA) gene and its flanking region
8279	21248	34860	1.6	6.6E-02	AF052572.1	NT	Homo sapiens chemokine receptor CXCR4 gene, promoter region and complete cds
8817	21784	36209	0.67	6.6E-02	AF006055.1	NT	Dicystostellum discoideum darlin (darA) gene, complete cds
9273	22239	35666	0.67	6.6E-02		NT	Human respiratory syncytial virus, complete genome
9273	22239	35667	0.67	6.6E-02	9628198	NT	Human respiratory syncytial virus, complete genome
10311	23235	36717	0.52	6.6E-02	AI458752.1	EST_HUMAN	U97608.x1 NCI_CGAP_J124 Homo sapiens cDNA clone IMAGE:2149488 3'
10447	23368	36860	1.65	6.6E-02	Y07848.1	NT	Homo sapiens EWS, gar22, mp22 and bam22 genes
10481	23403		0.6	6.6E-02	11430559	NT	Homo sapiens vinculin (VCL), mRNA
11310	24260	37788	4.9	6.6E-02	BF374248.1	EST_HUMAN	MR1-SN0064-010600-006-a12 SN0064 Homo sapiens cDNA
12063	24836		1.73	6.6E-02	C05789.1	EST_HUMAN	C05789 Human pancreatic islet Homo sapiens cDNA clone hbc5156
12719	25373		2.53	6.6E-02	9637891	NT	Mus musculus DIPB gene (Dipb), mRNA
13024	25572		1.31	6.6E-02	AF167430.1	NT	Rattus norvegicus cytochrome P450 2E1 (CYP2E1) gene, 5' flanking region
584	13652	26306	2.67	6.5E-02	BF027638.1	EST_HUMAN	601671046F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954178 5'
989	14041	26866	1.95	6.5E-02	7706068	NT	Homo sapiens E2F-like protein (LOC51270), mRNA
1392	14426	27395	3.5	6.5E-02	U47624.1	NT	Xenopus laevis alpha(E)-catenin mRNA, complete cds
1749	14778	27763	2.08	6.5E-02	AE000784.1	NT	Aquifex aeolicus section 96 of 109 of the complete genome
5638	18734	31896	1.71	6.5E-02	AA443991.1	EST_HUMAN	z446h12.s1 Soares ovary tumor NibHOT Homo sapiens cDNA clone IMAGE:756743 3' similar to gbclM28038
6893	19750	33027	0.83	6.5E-02	BF665340.1	EST_HUMAN	HLA CLASS II HISTOCOMPATIBILITY ANTIGEN, DR-5 BETA CHAIN (HUMAN);
							602118887F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276029 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7165	18398	31241	1.17	6.5E-02	U22881.1	NT	Azotobacter vinelandii ATCC 9046 negative regulator MucB (mucB) gene, partial cds
10302	23227	36709	0.65	6.5E-02	BE963200.2	EST_HUMAN	601656817R1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3865637 3'
10302	23227	36710	0.66	6.5E-02	BE963200.2	EST_HUMAN	601656817R1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3865637 3'
10832	23753	37252	0.53	6.5E-02	BF108300.1	EST_HUMAN	601823511F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4043138 5'
11002	23968	37482	4.51	6.5E-02	AA195648.1	EST_HUMAN	z32305.s1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:865144 3'
12164	25017		4.16	6.5E-02	IM21496.1	NT	Rabbit microsomal epoxide hydrolase
12526	25255		7.31	6.5E-02	AF102893.1	NT	Nectria haematococca kinesin related protein 2 (KRP2) gene, complete cds
577	13648	28559	1.74	6.4E-02	X94549.1	NT	A. carterae precursor of perleukin-chlorophyll-protein (PCP) gene
1748	14775	27780	0.93	6.4E-02	AE001777.1	NT	Thermotoga maritima section 89 of 138 of the complete genome
1748	14775	27781	0.93	6.4E-02	AE001777.1	NT	Thermotoga maritima section 89 of 138 of the complete genome
4933	16085	28007	1.16	6.4E-02	6896923	NT	Mus musculus histone deacetylase 5 (Hdac5), mRNA
5282	18270		2.58	6.4E-02	AA147572.1	EST_HUMAN	z51e04.r1 Soares_pregnant_uterus_Nhl-IPU Homo sapiens cDNA clone IMAGE:505470 5' similar to contains Alu repetitive element;
5525	18624	31559	1.19	6.4E-02	AI919566.1	EST_HUMAN	q607601.x1 Soares_testis_NhlT Homo sapiens cDNA clone IMAGE:1738249 3' similar to contains LTR8.b3
5982	19067	32265	1.15	6.4E-02	7305186	NT	LTR8 repetitive element;
6234	19307	32539	4.16	6.4E-02	AF052733.1	NT	Mus musculus IFN-response element binding factor 1 (IREBF-1), mRNA
6234	19307	32540	4.16	6.4E-02	AF052733.1	NT	Helarodera glycinis beta-1,4-endoglucanase-1 precursor (HG-eng-1) gene, complete cds
6542	19804	32866	0.72	6.4E-02	AI672898.1	EST_HUMAN	Helarodera glycinis beta-1,4-endoglucanase-1 precursor (HG-eng-1) gene, complete cds
6990	20213	33542	4.64	6.4E-02	BE974448.1	EST_HUMAN	we/3g12.x1 Soares_Dieckgrasse_cdon_NHGD Homo sapiens cDNA clone IMAGE:2346780 3'
7683	20651	34015	0.52	6.4E-02	AL162757.2	NT	601680425R2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950503 3'
8679	21647		2.79	6.4E-02	6763323	NT	Neisseria meningitidis serogroup A strain Z2491 complete genome; segment 87
8012	21978	36397	4	6.4E-02	AA093305.1	EST_HUMAN	Mus musculus chaperonin subunit 6a (zeta) (Cct6a), mRNA
9483	22447	36887	0.92	6.4E-02	AF150185.1	EST_HUMAN	K1419.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9944	22871		0.51	6.4E-02	BE834083.1	EST_HUMAN	AF150185 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDAIA10
10075	23002	36472	1.75	6.4E-02	AB011128.1	NT	RC1-OT0083-150600-014-g06 OT0083 Homo sapiens cDNA
10624	23546	37046	0.59	6.4E-02	AF087150.1	NT	Homo sapiens mRNA for KIAA0554 protein, partial cds
10624	23546	37047	0.59	6.4E-02	AF087150.1	NT	Homo sapiens DNA topoisomerase II beta (TOP2B) gene, exons 16, 17, and 18
				6.4E-02	AF087150.1	NT	Homo sapiens DNA topoisomerase II beta (TOP2B) gene, exons 16, 17, and 18
12018	24895	39492	2.18	6.4E-02	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPTS) gene, complete cds
12018	24895	39493	2.18	6.4E-02	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPTS) gene, complete cds

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12424	25881		5.38	6.4E-02	AF107880.1	NT	Homo sapiens mucin 5B (MUC5B) gene, partial cds
12476	26224	31783	5.68	6.4E-02	AJ277174.1	NT	Drosophila melanogaster mRNA for mod(mdg4)51.4 protein
1769	14798	27784	2.76	6.3E-02	AF106905.1	NT	Mus musculus major histocompatibility locus class III regions Hsc70t gene, partial cds; snRNP, G7A, NG23, Muis homolog, CLCP, NG24, NG25, and NG28 genes, complete cds; and unknown genes
3618	18682		2.77	6.3E-02	P37082	SWISSPROT	HEAT SHOCK PROTEIN 70 HOMOLOG
8258	19332	32563	1.08	6.3E-02	BF210736.1	EST_HUMAN	601873316F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4097469 5'
7463	20419		1.39	6.3E-02	X97869.1	NT	H. sapiens gene encoding La autoantigen
9646	22590	36039	1.01	6.3E-02	AJ24916.1	NT	Drosophila melanogaster Dornin gene, exons 1-3
10374	23297	36773	2.98	6.3E-02	AB010162.1	NT	Hepatitis G virus RNA for polyprotein (NS5A region), partial cds, strain: CMR-152
10634	23556		0.81	6.3E-02	AV688070.1	EST_HUMAN	AV688070 GKC Homo sapiens cDNA clone GKCAHE01 5'
11070	18332	32563	2.76	6.3E-02	BF210736.1	EST_HUMAN	601873316F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4097469 5'
4278	17307	30186	2.48	6.2E-02	AL161572.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 68
4365	17392		1.12	6.2E-02	AF271236.1	NT	Rattus norvegicus differentiation-associated Na-dependent inorganic phosphate cotransporter (DNPI1) mRNA, complete cds
4612	17633		6.56	6.2E-02	Q62191	SWISSPROT	52 KD RO PROTEIN (SJOGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A)) (RO52)
6683	20188	33513	0.67	6.2E-02	D49530.1	NT	Spirulina platensis DNA for adenylate cyclase, complete cds
7889	20633	34212	0.79	6.2E-02	U41453.1	NT	Rattus norvegicus PKC binding protein and substrate mRNA, complete cds
8158	21098		0.58	6.2E-02	AL161545.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 45
9289	26007		0.63	6.2E-02	M61101.1	NT	Porcine group C rotavirus (strain Cowden) outer membrane protein (VP7) mRNA, complete cds
9689	22652	36106	0.53	6.2E-02	AA778460.1	EST_HUMAN	af2da08.s1 Soares_tad_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1032178 3'
9835	22771	36226	1.25	6.2E-02	6677898	NT	Mus musculus stromal cell derived factor 2 (Sdf2), mRNA
12259	25979		15.66	6.2E-02	AE000750.1	NT	Aquifex aeolicus section 82 of 108 of the complete genome
12586	25289		1.38	6.2E-02	BE763085.1	EST_HUMAN	601583773F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3937842 5'
12676	25346	31764	3.54	6.2E-02	BF112039.1	EST_HUMAN	737708.x1 Soares_NSF_F8_9w_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3623815 3' similar to TR:Q9Y496 Q9Y496 HYPOTHETICAL 30.3 KD PROTEIN. [1];
256	13963	26278	3.09	6.1E-02	D16471.1	NT	Human mRNA, Xq terminal portion
4017	17056		15.65	6.1E-02	U7325.1	NT	Arabidopsis thaliana K ⁺ inward rectifying channel protein (AtKIC1) gene, complete cds
6043	19125	32330	0.62	6.1E-02	7662463	NT	Homo sapiens KIAA1062 protein (KIAA1062), mRNA
6043	19125	32331	0.62	6.1E-02	7662463	NT	Homo sapiens KIAA1052 protein (KIAA1052), mRNA
6235	19308		1.64	6.1E-02	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
8606	21674	34689	3.52	6.1E-02	X98268.1	NT	H. sapiens mRNA for B-HLH DNA binding protein
9008	21974	35393	1.93	6.1E-02	BE971863.1	EST_HUMAN	601651086F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:3834604 3'

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9008	21974	38394	1.93	6.1E-02	BE971863.1	EST_HUMAN	60165108R1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:3834604 3'
11082	24044	37588	3.44	6.1E-02	BE178643.1	EST_HUMAN	IL3-IT0018-110500-138-C08 HT0018 Homo sapiens cDNA
12216	25887		2.42	6.1E-02	X70989.1	NT	S. japonicum mRNA for serine-enzyme
12779	26774		1.35	6.1E-02	A188611.1	EST_HUMAN	tz59r07.x1 NC1_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2282801 3'
12812	25481		7.44	6.1E-02	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
1287	14302	27263	1.25	6.0E-02	AE001777.1	NT	Thermotoga maritima section 89 of 136 of the complete genome
2684	16680	28668	1.17	6.0E-02	AW068848.1	EST_HUMAN	EST380924 IMAGE resequences, MAG.1 Homo sapiens cDNA
2783	15775		1.98	6.0E-02	AB031289.1	NT	Mesocricetus corti mitochondrial DNA, NADH dehydrogenase subunit 4, tRNA-Gln, tRNA-Phe, tRNA-Met, ATPase subunit 6, and NADH dehydrogenase subunit 2
2948	13213	26137	1.47	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.t1 Stratiotes Helia cell e3 837216 Homo sapiens cDNA clone IMAGE:826310 5'
2948	13213	26138	1.47	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.t1 Stratiotes Helia cell e3 837216 Homo sapiens cDNA clone IMAGE:826310 5'
3243	16238	28222	1.52	6.0E-02	AA372376.1	EST_HUMAN	EST84288 Colon adenocarcinoma IV Homo sapiens cDNA 5' and similar to tissue-specific protein
3243	16238	28223	1.52	6.0E-02	AA372376.1	EST_HUMAN	EST84288 Colon adenocarcinoma IV Homo sapiens cDNA 5' and similar to tissue-specific protein
5472	16573		0.76	6.0E-02	AW370211.1	EST_HUMAN	RC3-BT0263-011199-013-b04 BT0263 Homo sapiens cDNA
6341	19410	32851	0.98	6.0E-02	A1807537.1	EST_HUMAN	w48h05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358873 3' similar to contains L1.1 L1 L1 repetitive element;
7180	18411	31212	2.78	6.0E-02	5174898	NT	Homo sapiens stimulated trans-acting factor (60 kDa) (STAF50) mRNA
7180	18411	31213	2.79	6.0E-02	5174898	NT	Homo sapiens stimulated trans-acting factor (50 kDa) (STAF50) mRNA
7394	20362	33714	2.08	6.0E-02	BF382349.1	EST_HUMAN	801815274F2 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4049226 5'
7508	20473	33833	0.57	6.0E-02	BF210488.1	EST_HUMAN	801874710F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4101074 5'
7844	20886	34277	1.71	6.0E-02	A1204276.1	EST_HUMAN	q558c08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754189 3'
8765	21732		0.52	6.0E-02	11466495	NT	Reclinomonas americana mitochondrion, complete genome
8827	22571	36020	1.17	6.0E-02	A1623167.1	EST_HUMAN	ts78a06.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:2237362 3'
8827	22571	36021	1.17	6.0E-02	A1623167.1	EST_HUMAN	ts78a06.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:2237362 3'
9761	22702	36169	2.03	6.0E-02	AJ245365.1	NT	Acipenser baeri partial IGLV gene for immunoglobulin light chain variable region, exons 1-2
9761	22702	36160	2.03	6.0E-02	AJ245365.1	NT	Acipenser baeri partial IGLV gene for immunoglobulin light chain variable region, exons 1-2
10265	23180	36675	0.66	6.0E-02	AA308767.1	EST_HUMAN	EST180654 Jurkat T-cells V Homo sapiens cDNA 5' and similar to heat shock protein 1, 60 kDa-like
10265	23180	36676	0.66	6.0E-02	AA308767.1	EST_HUMAN	EST180654 Jurkat T-cells V Homo sapiens cDNA 5' and similar to heat shock protein 1, 60 kDa-like
12475	25223	31792	3.08	6.0E-02	11431702	NT	Homo sapiens DNA-dependent protein kinase catalytic subunit-interacting protein 2 (KIP2), mRNA
12845	25455		3.16	6.0E-02	A1809279.1	EST_HUMAN	w69h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360885 3' similar to TR:060298
232	13332	26255	5.34	5.9E-02	AW834719.1	EST_HUMAN	RC1-DT0001-280100-012-e10 DT0001 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2896	18054	28975	3.42	5.9E-02	AF190289.1	NT	Mus musculus p53 tumor suppressor gene, exon 10 and 11, partial cds; alternatively spliced
4005	17822	30814	0.94	5.9E-02	AF008304.1	NT	Saccharomyces cerevisiae protein tyrosine phosphatase (PTP3) gene, complete cds
7077	26874	33409	0.62	5.9E-02	AF145680.1	NT	Drosophila melanogaster LDZ3107 string (string) mRNA, complete cds
8964	21930	35355	1.92	5.9E-02	9055249	NT	Mus musculus trophoblast related homeobox 5 (Drosophila) (trb5), mRNA
9806	21129		0.82	5.9E-02	BF242748.1	EST_HUMAN	601877608F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105894 5'
11138	24098		3.23	5.9E-02	6879870	NT	Mus musculus follistatin-like (Fst), mRNA
833	13988		6.03	5.8E-02	D90110.1	NT	Thiobacillus ferrooxidans merC, merA genes and URF-1
2872	15932		0.99	5.8E-02	AJ223621.1	NT	Populus trichocarpa COAOMT1 gene, exon 1 to exon 5
3676	16719	29633	1.32	5.8E-02	AE001776.1	NT	Thermoboga maritima section 87 of 138 of the complete genome
4382	17410	30292	5.33	5.8E-02	AW051927.1	EST_HUMAN	wk24c02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2544578 3'
4382	17410	30293	5.33	5.8E-02	AW051927.1	EST_HUMAN	wk24c02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2544578 3'
4578	17600	30495	4.73	5.8E-02	AJ247505.1	EST_HUMAN	q156f01.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1848687 3' similar to gb:U13142 COAGULATION FACTOR XI PRECURSOR (HUMAN);
4578	17600	30496	4.73	5.8E-02	AJ247505.1	EST_HUMAN	q156f01.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1848687 3' similar to gb:U13142 COAGULATION FACTOR XI PRECURSOR (HUMAN);
4604	17825	32298	2.93	5.8E-02	AF098284.1	NT	Gallus gallus tyrosine kinase JAK1 (JAK1) mRNA, complete cds
6014	19097	32298	0.53	5.8E-02	AA190894.1	EST_HUMAN	zp86a11.s1 Stradene HeLa cell s3 837218 Homo sapiens cDNA clone IMAGE:627068 3'
7941	20883	34273	2.52	5.8E-02	M89150.1	NT	Human polymorphic microsatellite DNA
7941	20883	34274	2.52	5.8E-02	M89150.1	NT	Human polymorphic microsatellite DNA
9014	21960	35369	0.59	5.8E-02	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12855	25968		10.6	5.8E-02	AA604269.1	EST_HUMAN	no75e11.s1 NCI_CGAP_AA1 Homo sapiens cDNA clone IMAGE:1112594 3'
3070	16127	28039	1.27	5.7E-02	AJ081644.1	EST_HUMAN	ou83b05.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632465 3' similar to WP-C37A2.2
3086	16143	29055	1.51	5.7E-02	AF119117.1	NT	CE08611 ;
3814	16854	29761	2.47	5.7E-02	AW066791.1	EST_HUMAN	Homo sapiens dopamine transporter (SLC8A3) gene, complete cds
6189	18208	31082	0.91	5.7E-02	AJ251973.1	NT	EST1378965 MAGE resequences, MAGE Homo sapiens cDNA
5306	18308		1.18	5.7E-02	6754525	NT	Homo sapiens partial steerin-1 gene
5879	19084		0.69	5.7E-02	AF275948.1	NT	Mus musculus low density lipoprotein receptor (Ldlr), mRNA
7704	20681	34025	0.69	5.7E-02	BE871911.1	EST_HUMAN	Homo sapiens ABCA1 (ABCA1) gene, complete cds
7704	20681	34026	0.59	5.7E-02	BE871911.1	EST_HUMAN	801447937F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3851985 5'
7788	20739	34111	0.68	5.7E-02	D78003.1	NT	801447937F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3851985 5'
7788	20739	34112	0.68	5.7E-02	D78003.1	NT	Xenopus laevis mRNA for fourth component of complement, complete cds
8495	21463	34878	1.74	5.7E-02	AJ286080.1	NT	Xenopus laevis mRNA for fourth component of complement, complete cds
10209	23134	36821	0.65	5.7E-02	6681260	NT	Rattus norvegicus mRNA for potassium channel, alpha subunit (kv8.2 gene)
							Mus musculus ec2 oncogene (Ec2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10930	23850	37365	0.49	5.7E-02	Z49903.1	NT	Lmoxicana cpb1 gene
11521	24462	38013	3.22	5.7E-02	A1752685.1	EST_HUMAN	cn18b09.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn18b09 random
11521	24462	38014	3.22	5.7E-02	A1752685.1	EST_HUMAN	cn18b09.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn18b09 random
11676	24642		1.89	5.7E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21G103
12573	25782		8.27	5.7E-02	D50320.1	NT	Pig DNA for SPAL-2, complete cds
12794	25855		3.72	5.7E-02	AF217460.1	NT	Homo sapiens fragile 16D oxidoreductase (FOR) gene, exons 8, 9, and partial cds
12830	25958		5.65	5.7E-02	AF261280.1	NT	Plan troglodytes apolipoprotein-E gene, complete cds
1528	14562	27533	1.85	5.6E-02	AF094455.1	NT	Hydroxycylo ribundifolia ribosomal protein L16 (rpl16) gene, intron; chloroplast gene for chloroplast product
4671	17692	30578	1.92	5.6E-02	AB013100.1	NT	Lycopodium esculentum LE-ACS9 mRNA for 1-aminocyclopropane-1-carboxylate synthase, complete cds
4725	17745	30636	1.21	5.6E-02	AA290589.1	EST_HUMAN	z45c01.at NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700416 3'
6817	19871	33180	5.93	5.6E-02	AW172708.1	EST_HUMAN	y02c10.x1 NCL_CGAP_U2 Homo sapiens cDNA clone IMAGE:2856050 3' similar to TR:O94979 O94979 KIAA0905 PROTEIN. ;
7075	20097	33407	0.77	5.6E-02	AA868182.1	EST_HUMAN	cd47H12.at NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1371119 3' similar to contains Alu repetitive element; contains element L1 repetitive element ;
7368	20328	33677	2.94	5.6E-02	BE009001.1	EST_HUMAN	QVO-BN0147-290400-214-g07 BN0147 Homo sapiens cDNA
8141	21078	34478	0.61	5.6E-02	A1183583.1	EST_HUMAN	q064g11.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1734308 3'
9154	22120	35548	2.47	5.6E-02	BE542663.1	EST_HUMAN	601097168F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453279 5'
9154	22120	35549	2.47	5.6E-02	BE542663.1	EST_HUMAN	601097168F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453279 5'
10171	23086	36576	1.06	5.6E-02	AA482884.1	EST_HUMAN	nf46d07.at NCL_CGAP_AW1 Homo sapiens cDNA clone IMAGE:923245 similar to TR:G768859 G768859 LAMINA ASSOCIATED POLYPEPTIDE 1C. ;
11891	24772		1.87	5.6E-02	AF280225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
2683	15680	28678	8.23	5.6E-02	X97868.1	NT	H.sapiens gene encoding La autoantigen
3228	16283	28207	3.44	5.5E-02	6755501	NT	Mus musculus SH3 domain protein 1B (Sh3d1B), mRNA
4244	17273	30157	1.13	5.5E-02	L41581.1	NT	Gallid herpesvirus mRNA fragment
5742	18838	32017	3.09	5.5E-02	Q01174	SWISSPROT	TROPOMYOSIN ALPHA CHAIN, NON MUSCLE
6141	18838	32017	3.81	5.5E-02	Q01174	SWISSPROT	TROPOMYOSIN ALPHA CHAIN, NON MUSCLE
7803	20364	33925	1.85	5.5E-02	6755502	NT	Mus musculus tufelin 1 (Tuf1), mRNA
8457	21428	34842	0.69	5.5E-02	AF170911.1	NT	Homo sapiens sodium-dependent vitamin C transporter 1 (SVCT1) mRNA, complete cds
8457	21428	34843	0.69	5.5E-02	AF170911.1	NT	Homo sapiens sodium-dependent vitamin C transporter 1 (SVCT1) mRNA, complete cds
10013	22940	36405	0.63	5.5E-02	10947034	NT	Homo sapiens eIF4E-transporter (4E-T), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10013	22940	36408	0.63	5.5E-02	10947034	NT	Homo sapiens eIF4E-transporter (4E-T), mRNA
10107	23033	36510	1.45	5.5E-02	U69482.1	NT	Mus musculus second IL11 receptor alpha chain (IL11Ra2) gene, exons 1 and 2
11360	24308	37835	6.48	5.5E-02	U08771.1	NT	Citrobacter freundii DSM 30040 cyclopropane fatty acid synthase (cfa) gene, partial cds, dihydroxyacetone kinase (dhaK), glycerol dehydrogenase (dhaD), transcriptional activator (dhaR), 1,3-propanediol dehydrogenase (dhaT), glycerol dehydratase (dhaB), >
13089	25920	31303	1.99	5.5E-02	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
3032	16090		1.02	5.4E-02	AJ277488.1	NT	Oryza sativa rbb3-1 gene for putative Bowman Birk trypsin inhibitor
3433	18323		6.97	5.4E-02	BE073488.1	EST_HUMAN	RC5-BT0559-140200-012-Q03 BT0559 Homo sapiens cDNA
3831	16971	28885	0.7	5.4E-02	U85806.1	NT	Hirudo medicinalis SNAP-25 homolog mRNA, complete cds
9462	21431		1.05	5.4E-02	Z89116.1	NT	Bacillus subtilis complete genome (section 13 of 21): from 2385281 to 2613730
9426	22390	36828	0.63	5.4E-02	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
11057	24020	37543	1.54	5.4E-02	U20780.1	NT	Neurospora crassa ubiquinol-cytochrome c oxidoreductase subunit VIII (QCR8) mRNA, complete cds
1056	14102	27052	1.91	5.3E-02	AW391248.1	EST_HUMAN	QVO-ST0213-021289-062-a09 ST0213 Homo sapiens cDNA
1056	14102	27053	1.91	5.3E-02	AW391248.1	EST_HUMAN	QVO-ST0213-021289-062-a09 ST0213 Homo sapiens cDNA
1506	14539	27511	16.63	5.3E-02	T94759.1	EST_HUMAN	ye3712.1 Striatogene lung (#937210) Homo sapiens cDNA clone IMAGE:119951 5' similar to gb:K01508
2504	15507	28533	2.12	5.3E-02	AJ278408.1	NT	HLA CLASS II HISTOCOMPATIBILITY ANTIGEN, DP(1) ALPHA CHAIN (HUMAN);
2853	16011	28537	0.95	5.3E-02	M58417.1	NT	Pseudomonas putida tgsS gene
2853	16011	28538	0.95	5.3E-02	M58417.1	NT	Drosophila melanogaster laminih B2 gene, complete cds
3167	16222	29137	5.38	5.3E-02	AJ278408.1	NT	Drosophila melanogaster laminih B2 gene, complete cds
4841	17682	30550	0.9	5.3E-02	AJ011048.1	NT	Pseudomonas putida tgsS gene
5125	18134	31011	8.41	5.3E-02	M80463.1	NT	Arabidopsis thaliana eli5 gene, exons 1-11
5392	18495	31372	1.8	5.3E-02	AE000527.1	NT	Mus musculus caudal type homeobox-1 (Cdx-1) gene, complete cds
5392	18495	31373	1.8	5.3E-02	AE000527.1	NT	Helicobacter pylori 26695 section 5 of 134 of the complete genome
6222	18286	32530	3.03	5.3E-02	M85289.1	NT	Helicobacter pylori 26695 section 5 of 134 of the complete genome
7068	20080	33398	3.94	5.3E-02	9695413	NT	Human heparan sulfate proteoglycan (HSPG2) mRNA, complete cds
7289	20271	33606	1.23	5.3E-02	U32832.1	NT	Lymphocystis disease virus 1, complete genome
7685	20546		2.12	5.3E-02	S78221.1	NT	Haemophilus influenzae Rd section 147 of 163 of the complete genome
8209	21108	34507	0.51	5.3E-02	P38742	SWISSPROT	nuclear protein TIF1 isoform [hica, mRNA, 4053 nt]
8748	21716		0.5	5.3E-02	U10088.1	NT	HYPOTHEITICAL 130.0 KD PROTEIN IN SNF8-SPO11 INTERGENIC REGION
9481	22445	35886	2.05	5.3E-02	X03127.1	NT	Mus musculus 129/Sv cystatin C (cst3) gene, complete cds
10491	23413	36911	0.61	5.3E-02	AB022805.1	NT	Podospora anserina mitochondrial epsilon-ten DNA
10491	23413	36912	0.61	5.3E-02	AB022805.1	NT	Homo sapiens hCMT1b mRNA for mRNA (guanine-7-methyltransferase, complete cds)
10491	23413	36912	0.61	5.3E-02	AB022805.1	NT	Homo sapiens hCMT1b mRNA for mRNA (guanine-7-methyltransferase, complete cds)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10618	23540		0.6	5.3E-02	Y07907.1	NT	D. rerio mRNA for zp-23 POU gene, splice variant (neurula, 9-16 hpf and postmitogenesis, 20-28 hpf)
10695	23617	37111	0.69	6.3E-02	X68432.1	NT	B. rerio pou3f mRNA for transcription factor
12092	24693	38558	2.08	5.3E-02	X68435.1	NT	H. sapiens mRNA for HMG-CoA-synthase
2293	15305		89.73	5.2E-02	5031808	NT	Homo sapiens maspin A, alpha (PABA peptide hydrolase) (MEP1A) mRNA
3131	16188	23097	1.98	5.2E-02	AJ277681.1	NT	Homo sapiens partial LMO1 gene for LIM domain only 1 protein, exon 1
3131	16188	28098	1.98	5.2E-02	AJ277681.1	NT	Homo sapiens partial LMO1 gene for LIM domain only 1 protein, exon 1
3660	17000	29915	0.73	5.2E-02	AF236101.1	NT	Arabidopsis thaliana putative dicarboxylate diiron protein (Crd1) mRNA, complete cds
3662	17002		0.97	5.2E-02	6671757	NT	Mus musculus cytokine inducible SH2-containing protein 3 (Cish3), mRNA
4307	17336	30214	3.36	6.2E-02	U07132.1	NT	Human steroid hormone receptor Ner-1 mRNA, complete cds
6025	19108	32310	0.66	5.2E-02	U14731.1	NT	Saccharomyces cerevisiae Cdc54p (CDC54) gene, complete cds
6228	19302		1.22	5.2E-02	AB30966.1	EST_HUMAN	wj80e04.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE2409150 3' similar to contains MER15.b1 MER16 repetitive element
7489	20454	33813	1.07	5.2E-02	P36322	SWISSPROT	DNA POLYMERASE PROCESSIVITY FACTOR (POLYMERASE ACCESSORY PROTEIN) (PAP) (DNA-BINDING GENE 18 PROTEIN)
8537	21605		2.16	5.2E-02	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
10087	23014	36487	1.77	5.2E-02	D10927.1	NT	Turnip mosaic virus genomic RNA for Capsid protein, complete cds
10087	23014	36488	1.77	5.2E-02	D10927.1	NT	Turnip mosaic virus genomic RNA for Capsid protein, complete cds
11888	24769	38357	6.42	5.2E-02	F32388.1	EST_HUMAN	HSPD25097 HM3 Homo sapiens cDNA clone s3000039A02
11888	24769	38358	5.42	5.2E-02	F32388.1	EST_HUMAN	HSPD25097 HM3 Homo sapiens cDNA clone s3000039A02
12693	25358		1.55	5.2E-02	Q03030	SWISSPROT	OXALOACETATE DECARBOXYLASE ALPHA CHAIN
2372	16380		0.97	5.1E-02	AL194071.1	EST_HUMAN	DKFZp547D073.1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D073.5
5041	18054		0.94	5.1E-02	AB031740.1	NT	Homo sapiens PBI gene for salivary proline-rich protein P-B, complete cds
6830	18894	33175	0.68	5.1E-02	AF280369.1	NT	HIV-1 patient 98 from Italy protease (pol) gene, complete cds
7039	18371	31258	1.76	5.1E-02	BF378826.1	EST_HUMAN	QV0-UM0051-250800-350-608 UM0051 Homo sapiens cDNA
8568	21584	34978	0.77	5.1E-02	M26434.1	NT	Human hypoxanthine phosphoribosyltransferase (hIPRT) gene, complete cds
8568	21584	34979	0.77	5.1E-02	M26434.1	NT	Human hypoxanthine phosphoribosyltransferase (hIPRT) gene, complete cds
8630	21658	35081	1.26	5.1E-02	AJ131886.1	NT	Spodoptera littoralis mRNA for 3-dehydrodysone 3beta-reductase
9237	22203	35634	0.61	5.1E-02	P02533	SWISSPROT	KERATIN, TYPE I CYTOSKELETAL 14 (CYTOKERATIN 14) (K14) (CK 14)
9237	22203	35635	0.61	5.1E-02	P02533	SWISSPROT	KERATIN, TYPE I CYTOSKELETAL 14 (CYTOKERATIN 14) (K14) (CK 14)
10168	23093	36571	7.1	5.1E-02	AF012898.1	NT	Candida albicans protein phosphatase Ssd1 homolog (SSD1) gene, complete cds
10542	23484	36959	1.66	5.1E-02	P40603	SWISSPROT	ANTER-SPECIFIC PROLINE-RICH PROTEIN APG (PROTEIN CEX)
11179	24135	37665	2.19	5.1E-02	AF083930.1	NT	Homo sapiens ES18 mRNA, partial cds
11179	24135	37666	2.19	5.1E-02	AF083930.1	NT	Homo sapiens ES18 mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12689	25359		1.75	5.1E-02	AF062467.1	NT	Cucumis melo polygalacturonase precursor (MPG3) mRNA, complete cds
12691	25331		1.8	5.1E-02	AA834104.1	EST_HUMAN	n73802.e1 NCI_CGAP_P410 Homo sapiens cDNA clone IMAGE:598139
483	13556	28481	2.16	5.0E-02	AF088004.1	NT	Mus musculus fatty acid amide hydrolase gene, exon 10
935	13988	28338	4.55	5.0E-02	Z33898.1	NT	O. virginianus (HEL37) microsatellite DNA
1209	14247	27205	4.03	5.0E-02	Z89104.1	NT	Bacillus subtilis complete genome (section 1 of 21): from 1 to 213080
2007	15028	28036	4.94	5.0E-02	P02810	SWISSPROT	SALIVARY ACIDIC PROLINE-RICH PHOSPHOPROTEIN 1/2 PRECURSOR (PRP-1/PRP-3) (PRP-2/PRP-4) (PIF-FPIF-S) (PROTEIN APROTEIN C) [CONTAINS: PEPTIDE P-C]
2829	14040	28986	1.82	5.0E-02	U72742.1	NT	Cryptosporidium parvum UDP-glucuronosyltransferase (UGT2B13) mRNA, complete cds
3348	16399		1.34	5.0E-02	7305810	NT	Mus musculus Uro-51 like kinase 2 (C. elegans) (Ulk2), mRNA
3809	18854		1.01	5.0E-02	U92782.1	NT	Haemophilus influenzae Rd section 97 of 183 of the complete genome
3886	18739	29652	13.52	5.0E-02	U12789.2	NT	Anthrax toxin period clock protein homolog mRNA, complete cds
6263	18326	32657	0.77	5.0E-02	AF088284.1	NT	Gallus gallus tyrosine kinase JAK1 (JAK1) mRNA, complete cds
6441	19508		1.25	5.0E-02	AJ242825.1	NT	Mus musculus Dmp-1 gene, exons 1-6
7181	18412	31214	0.8	5.0E-02	P35616	SWISSPROT	NEUROFILAMENT TRIPLET L PROTEIN (NEUROFILAMENT LIGHT POLYPEPTIDE) (NF-L)
7785	20738	34110	12.03	5.0E-02	P35616	SWISSPROT	NEUROFILAMENT TRIPLET L PROTEIN (NEUROFILAMENT LIGHT POLYPEPTIDE) (NF-L)
8008	20948		0.52	5.0E-02	AW062464.1	EST_HUMAN	MR0-CT0064-100899-002-g10 CT0064 Homo sapiens cDNA
10550	23482	36977	1.28	5.0E-02	AF305238.1	NT	Mus musculus Fas-interacting serine/threonine kinase 3 (Fis3) mRNA, complete cds
11820	24703	38285	2.47	5.0E-02	U67600.1	NT	Methanococcus jannaschii section 142 of 150 of the complete genome
12226	26918		6.4	5.0E-02	Q04047	SWISSPROT	NO-ON-TRANSIENT A PROTEIN
228	13325		27.61	4.9E-02	M14230.1	NT	Chicken 28-kDa vitamin D-dependent calcium-binding protein (CaBP-28) mRNA, complete cds
369	13455	28384	2.96	4.9E-02	AF276948.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
369	13455	28385	2.96	4.9E-02	AF276948.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
3302	16355	28274	1.84	4.9E-02	P54258	SWISSPROT	ATROPHIN-1 (DENTATORUBRAL-PALLIDOLYSIAN ATROPHY PROTEIN)
3584	16829		0.7	4.9E-02	AA188940.1	EST_HUMAN	zq49a12.e1 Stragone hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632826 3' similar to contains Alu repetitive element; contains element MSR1 repetitive element;
3605	16850	28568	0.96	4.9E-02	AA400914.1	EST_HUMAN	z78a03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728428 3'
3605	16850	28567	0.96	4.9E-02	AA400914.1	EST_HUMAN	z78a03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728428 3'
4877	17894	30783	2.11	4.9E-02	AW167821.1	EST_HUMAN	xg56g10.x1 NCI_CGAP_U44 Homo sapiens cDNA clone IMAGE:2832386 3'
4877	17894	30784	2.11	4.9E-02	AW167821.1	EST_HUMAN	xg56g10.x1 NCI_CGAP_U44 Homo sapiens cDNA clone IMAGE:2832386 3'
5444	18546	31458	1.71	4.9E-02	L00122.1	NT	Rat elastase II gene, exon 6
5444	18546	31459	1.71	4.9E-02	L00122.1	NT	Rat elastase II gene, exon 6
7349	20319	33868	2.83	4.9E-02	AE000980.1	NT	Archaeoglobus fulgidus section 127 of 172 of the complete genome
8963	21929		0.91	4.9E-02	AE002309.1	NT	Chlamydia muridarum, section 40 of 85 of the complete genome
9107	22073	36500	0.8	4.9E-02	AL161559.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 59

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10656	23578	37075	0.53	4.9E-02	P18532	SWISSPROT	TRANSCRIPTION FACTOR E3
11730	24618	38193	3.44	4.9E-02	AF008303.1	NT	Homo sapiens prepro placental TGF-beta gene, complete cds
12879	25473		6.88	4.9E-02	M19384.1	NT	Human gamma-B-crystallin (gamma 1-2) and gamma-C-crystallin (gamma 2-1) genes, complete cds
330	13420	26344	1.06	4.8E-02	D16471.1	NT	Human mRNA, Xq terminal portion
331	13420	26344	2.41	4.8E-02	D16471.1	NT	Human mRNA, Xq terminal portion
489	13562	26486	12.99	4.8E-02	AF003100.1	NT	Arabidopsis thaliana AP2 domain containing protein RAP2.7 mRNA, partial cds
2281	15294	28318	2.24	4.8E-02	W51983.1	EST_HUMAN	z49002.s1 Soares_senescent_fibroblasts_NHHSF Homo sapiens cDNA clone IMAGE:325811 3' similar to gb:M30938 LUPUS KU AUTOANTIGEN PROTEIN P86 (HUMAN);
3222	16277	28202	1.93	4.8E-02	X17144.1	NT	Tetrahymena rostrata histone H3II and histone H4II intergenic DNA
4698	17719		1.24	4.8E-02	Z54280.1	NT	S. sacrofa gene for skeletal muscle ryanodine receptor
5174	18183	31060	0.63	4.8E-02	U91914.1	NT	Streptococcus constellatus D-alanine:D-alanine ligase gene, partial cds
8477	21446	34863	1.56	4.8E-02	AW388497.1	EST_HUMAN	MR2-ST0129-221099-012-502 ST0129 Homo sapiens cDNA
9485	22449	35889	0.76	4.8E-02	AJ001398.1	NT	Fugu rubripes rps24 gene
9485	22449	35890	0.76	4.8E-02	AJ001398.1	NT	Fugu rubripes rps24 gene
12505	26242		1.35	4.8E-02	9632893	NT	Streptococcus thermophilus bacteriophage Sfi19, complete genome
7004	20130	33445	3.77	4.7E-02	W01153.1	EST_HUMAN	y29709.r1 Soares melanocyte 2Nbl-IM Homo sapiens cDNA clone IMAGE:281017 5' similar to contains Alu repetitive element
7069	20091	33369	0.88	4.7E-02	BF68625.1	EST_HUMAN	602143554F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4304772 5'
7069	20091	33400	0.88	4.7E-02	BF68625.1	EST_HUMAN	602143554F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4304772 5'
7103	20037	33340	1.56	4.7E-02	M62752.1	NT	Rat statin-related protein (st) gene, complete CDS
8694	21662	34976	8.56	4.7E-02	X15543.1	NT	B. taurus mRNA for RF-36-DNA-binding protein
9305	22270	35701	1.65	4.7E-02	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
9327	22282		2.51	4.7E-02	AB028678.1	NT	Gallus gallus Wpkcl-8 gene, complete cds
8682	22544	35965	7.94	4.7E-02	X15543.1	NT	B. taurus mRNA for RF-36-DNA-binding protein
10005	22832	36395	0.55	4.7E-02	BF305237.1	EST_HUMAN	601892892F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138414 5'
10092	23018		0.56	4.7E-02	AB73042.1	EST_HUMAN	wer78c10.x1 Soares_NF_L_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347314 3'
12783	25970		1.97	4.7E-02	P62061	SWISSPROT	HOMEOBOX PROTEIN GBX-2 (GASTRULATION AND BRAIN-SPECIFIC HOMEOBOX PROTEIN 2)
13022	25570		1.56	4.7E-02	AJ277682.1	NT	Homo sapiens partial TUB gene for bunny (mouse) homolog and LMO1 gene for LIM domain only 1 protein
270	13366	26282	1.08	4.6E-02	BE153583.1	EST_HUMAN	PMO-HT0339-251189-003-g05 HT0339 Homo sapiens cDNA
741	13802	26741	3.47	4.6E-02	AE000445.1	NT	Escherichia coli K-12 MG1655 section 335 of 400 of the complete genome
1391	14395	27366	3.62	4.6E-02	AV727059.1	EST_HUMAN	AV727059 HTC Homo sapiens cDNA clone HTCBW001 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2498	15499	28525	4.32	4.6E-02	AW238023.1	EST_HUMAN	xr24f03.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2694653 3' similar to SW:GRF1_HUMAN
2819	13368	28282	1.03	4.6E-02	BE153593.1	EST_HUMAN	Q12849 G-RICH SEQUENCE FACTOR-1:
3020	16078	28388	0.67	4.6E-02	BE153593.1	EST_HUMAN	PMO-HT0339-251199-003-g05 HT0339 Homo sapiens cDNA
3342	16078	28389	0.67	4.6E-02	BE153593.1	EST_HUMAN	PMO-HT0339-251199-003-g05 HT0339 Homo sapiens cDNA
3507	16078	28389	0.91	4.6E-02	BE153593.1	EST_HUMAN	PMO-HT0339-251199-003-g05 HT0339 Homo sapiens cDNA
4149	17180		1.24	4.6E-02	AF220365.1	NT	Mus musculus nucleolar RNA helicase II/Gu (dbp21) gene, complete cds
5252	18280	31129	0.94	4.6E-02	AA079157.1	EST_HUMAN	znr2c10.s1 Stratiogene ovarian cancer (#837219) Homo sapiens cDNA clone IMAGE:545394 3' similar to gb:X03212 KERATIN, TYPE II CYTOSKELETAL 7 (HUMAN);
5823	18913	32098	1.42	4.6E-02	AF078962.1	NT	Haplochromis burtoni gonadotropin-releasing hormone and GnRH-associated peptide precursor (GnRH2) gene, complete cds
6357	19428	32688	4.48	4.6E-02	X61624.1	NT	C.reinhardtii atp2 (atpB) mRNA
6357	19428	32689	4.48	4.6E-02	X61624.1	NT	C.reinhardtii atp2 (atpB) mRNA
6868	20191	33518	1.51	4.6E-02	A1149574.1	EST_HUMAN	qc60b06.x1 Soares_placenta_8to9weeks_2Nbl-IP-8to9W Homo sapiens cDNA clone IMAGE:1719871 3' similar to contains L1.13 L1 repetitive element;
8134	21071	34470	0.68	4.6E-02	6978720	NT	Rattus norvegicus Cathopelin H (Cath), mRNA
9003	21889	35391	2.89	4.6E-02	BE154006.1	EST_HUMAN	PMO-HT0339-060400-009-G12 HT0339 Homo sapiens cDNA
11731	24817	38194	5.31	4.6E-02	AA913328.1	EST_HUMAN	cd27h09.at Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:1524737 3'
12761	25967		1.99	4.6E-02	L11692.1	NT	Oryctolagus cuniculus macrophage scavenger receptor type II mRNA, complete cds
12882	25552		8.41	4.6E-02	X67808.1	NT	Human germline immunoglobulin lambda light chain gene
447	13620	28453	1.9	4.5E-02	P22448	SWISSPROT	RETINOIC ACID RECEPTOR BETA (RAR-BETA)
1222	14280	27217	0.78	4.5E-02	AF005730.1	NT	Marburg virus strain MIS.Africa/Johannesburg/1975/Ozolin VP35 gene, complete cds
1222	14280	27218	0.78	4.5E-02	AF005730.1	NT	Marburg virus strain MIS.Africa/Johannesburg/1975/Ozolin VP35 gene, complete cds
1821	14848	27841	4.23	4.5E-02	P32182	SWISSPROT	HEPATOCYTE NUCLEAR FACTOR 3-BETA (HNF-3B)
2119	15138	28158	3.34	4.5E-02	AE003984.1	NT	Xylella fastidiosa, section 110 of 229 of the complete genome
3738	16778	28691	4.42	4.5E-02	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6358	19427	32870	1.63	4.5E-02	AJ400877.1	NT	Homo sapiens ASC3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
6858	19713	32890	0.94	4.5E-02	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
7062	20084	33382	0.98	4.5E-02	L26487.1	NT	Methanoscarchia frisia carbon monoxide dehydrogenase large subunit (cdh1A) gene, carbon monoxide dehydrogenase small subunit (cdh1B) gene, complete cds
7062	20084	33383	0.98	4.5E-02	L26487.1	NT	Methanoscarchia frisia carbon monoxide dehydrogenase large subunit (cdh1A) gene, carbon monoxide dehydrogenase small subunit (cdh1B) gene, complete cds
8736	21704	35128	2.34	4.5E-02	AF036884.1	NT	Arabidopsis thaliana CCAAT-box binding factor HAP3 homolog gene, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10308	23233	36715	4.58	4.5E-02	AA325218.1	EST_HUMAN	EST28167 Cerebellum II Homo sapiens cDNA 5' and similar to similar to neuro-D4 protein
10460	23382	36875	0.43	4.5E-02	X95508.1	NT	A europaeum mRNA for legumin-like protein
10577	23489	36891	0.81	4.5E-02	AB000470.1	NT	Gallus gallus mRNA for alpha1 integrin, complete cds
12440	25203	31828	2.95	4.5E-02	11418013	NT	Homo sapiens rat finger protein-like 3 (RFP13), mRNA
12823	25863	31440	7.3	4.5E-02	AA191087.1	EST_HUMAN	z4311.1.1 Stragene hNT neuron (8937233) Homo sapiens cDNA clone IMAGE:632493 5'
222	13322		4.84	4.4E-02	BE972733.1	EST_HUMAN	601682154F1 NIH_MGC 82 Homo sapiens cDNA clone IMAGE:3935388 5'
2107	15124		6.38	4.4E-02	P31588	SWISSPROT	HYPOTHETICAL PROTEIN (ORF 2280)
2498	15501	28527	2.11	4.4E-02	AW875475.1	EST_HUMAN	QV2-PT0012-010300-070-g02 PT0012 Homo sapiens cDNA
3654	16897	28612	2.01	4.4E-02	AF159160.1	NT	Myxococcus xanthus serine/threonine kinase Pkn10 (pkn10) gene, complete cds
4657	17678	30593	1.25	4.4E-02	AF109807.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4657	17678	30584	1.25	4.4E-02	AF109807.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4771	17791		0.94	4.4E-02	AJ222689.1	NT	Ovis aries CCAAT-enhancer binding protein epsilon gene
7325	20296	33639	0.59	4.4E-02	AF095824.1	NT	Canis familiaris matrix metalloproteinase 9 (MMP-9) mRNA, partial cds
7325	20296	33640	0.59	4.4E-02	AF095824.1	NT	Canis familiaris matrix metalloproteinase 9 (MMP-9) mRNA, partial cds
9105	22071	35487	2.17	4.4E-02	AA738688.1	EST_HUMAN	hw13h03.s1 NCJ_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1239221 3'
11409	24353	37888	3.75	4.4E-02	AF060689.1	NT	Hepatitis E virus strain HEV-US2 polypeptide (ORF1), (ORF3), and capsid protein (ORF2) genes, complete cds
11533	24474	38025	2.56	4.4E-02	AA469739.1	EST_HUMAN	ae33704.1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897631 5'
12159	25014		2.22	4.4E-02	AB040928.1	NT	Homo sapiens mRNA for KIAA1493 protein, partial cds
12346	25980		1.83	4.4E-02	BF241245.1	EST_HUMAN	601878748F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107418 5'
781	13841	26786	5.93	4.3E-02	AF003249.1	NT	Marone saxatilis myosin heavy chain FM3A (FM3A) mRNA, complete cds
2575	15576	28595	1.4	4.3E-02	AV704878.1	EST_HUMAN	AV704878 ADB Homo sapiens cDNA clone ADBA0H08 5'
3443	16490	29409	8.93	4.3E-02	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3671	16714		1.25	4.3E-02	AF080588.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
6644	19702	32877	4.62	4.3E-02	P30427	SWISSPROT	PLECTIN
6644	19702	32878	4.62	4.3E-02	P30427	SWISSPROT	PLECTIN
6898	19948	33245	0.73	4.3E-02	AA652268.1	EST_HUMAN	ne68c12.s1 NCJ_CGAP_P2 Homo sapiens cDNA clone IMAGE:1189896
8858	21625	35248	0.9	4.3E-02	AF283359.1	NT	Homo sapiens desmoglein 3 (DSG3) gene, complete cds, alternatively spliced
9153	22119	35546	0.95	4.3E-02	X55322.1	NT	H. sapiens NCAM mRNA for neural cell adhesion molecule
9153	22119	35547	0.95	4.3E-02	X55322.1	NT	H. sapiens NCAM mRNA for neural cell adhesion molecule
823	13881	26832	1.85	4.2E-02	AU123327.1	EST_HUMAN	AU123327 NT2RM2 Homo sapiens cDNA clone NT2RM2000020 6'
867	13923		2.58	4.2E-02	AU123327.1	EST_HUMAN	AU123327 NT2RM2 Homo sapiens cDNA clone NT2RM2000020 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
867	13952	26910	0.83	4.2E-02	AW003645.1	EST_HUMAN	wc34g01.x1 NCL CGAP_Pit1 Homo sapiens cDNA clone IMAGE:2545584 3' similar to TR-Q63291 Q63291 L1 RETROPOSON, ORF2 MRNA; contains L1, L1, L1 repetitive element;
1733	14763		1.54	4.2E-02	AL445068.1	NT	Thermoplasma acidophilum complete genome; segment 4/5
1793	14822	27808	1.02	4.2E-02	P23091	SWISSPROT	TRANSFORMING PROTEIN MAF
3677	16720	28634	2.18	4.2E-02	P23091	SWISSPROT	TRANSFORMING PROTEIN MAF
4774	17794	30688	0.73	4.2E-02	BF342985.1	EST_HUMAN	602017103F1 NCL CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4152872 5'
5089	18794	31967	0.85	4.2E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
5099	18794	31968	0.85	4.2E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
7175	18406	31205	0.73	4.2E-02	BE288285.1	EST_HUMAN	601124598F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2886319 5'
7769	20722	34094	4.62	4.2E-02	AF276762.1	NT	Legionella pneumophila catalase-peroxidase (katA) gene, complete cds
7783	20745	34118	0.61	4.2E-02	AV730347.1	EST_HUMAN	AV730347 HTF Homo sapiens cDNA clone HTFAV104 5'
9162	22128	35556	3.74	4.2E-02	P05095	SWISSPROT	ALPHA-ACTININ 3, NON MUSCULAR (F-ACTIN CROSS LINKING PROTEIN)
10525	23447	36945	1.19	4.2E-02	Q16850	SWISSPROT	T-BRAIN-1 PROTEIN (T-BOX BRAIN PROTEIN 1) (TBR-1) (TES-56)
11379	24328	37855	1.58	4.2E-02	AA976118.1	EST_HUMAN	on33b11.s1 NCL CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1558481 3' similar to gb:M65280
11637	24574	38138	2.65	4.2E-02	BE815822.1	EST_HUMAN	INTERLEUKIN-12 BETA CHAIN PRECURSOR (HUMAN);
11637	24574	38139	2.65	4.2E-02	BE815822.1	EST_HUMAN	PM3-BN0174-250500-009-d10 BN0174 Homo sapiens cDNA
12694	25008		5.62	4.2E-02	AB83484.1	EST_HUMAN	PM3-BN0174-250500-009-d10 BN0174 Homo sapiens cDNA
12694	25008		5.62	4.2E-02	AB83484.1	EST_HUMAN	w49g10.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2510850 3'
12694	25008		5.62	4.2E-02	AB83484.1	EST_HUMAN	Staphylococcus aureus HSP10 and HSP60 genes
511	13592	26503	0.75	4.1E-02	AF200629.1	NT	Homo sapiens HPS1 gene, intron 5
2685	15681	28699	1.16	4.1E-02	AE002330.2	NT	Chlamydia muridarum, section 60 of 85 of the complete genome
4489	17624		7.84	4.1E-02	AW863484.1	EST_HUMAN	QV1-NN0012-180400-164-406 NN0012 Homo sapiens cDNA
5302	18305	31166	0.62	4.1E-02	5902103	NT	Homo sapiens SRY (sex-determining region Y)-box 10 (SOX10), mRNA
5728	18820	31999	1.08	4.1E-02	BE251894.1	EST_HUMAN	601107535F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343856 5'
5728	18820	32000	1.08	4.1E-02	BE251894.1	EST_HUMAN	601107535F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343856 5'
7068	20088		0.9	4.1E-02	X76881.1	NT	A.thaliana mRNA for plasma membrane intrinsic protein 1a
7308	20277	33615	1.19	4.1E-02	AE002132.1	NT	Ureaplasma urealyticum section 33 of 59 of the complete genome
7768	20709	34078	2	4.1E-02	7682347	NT	Homo sapiens KIAA0867 protein (KIAA0867), mRNA
7860	20804	34180	0.7	4.1E-02	L02110.1	NT	Mus musculus proviral insertion in the cGMP-phosphodiesterase (rd beta PDE) gene, intron 1, with the proviral insert encompassing the env pseudogene (5' end) and 3' LTR

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8042	20979	34375	2.63	4.1E-02	AF026198.1	NT	Fugu rubripes neural cell adhesion molecule L1 homolog (L1-CAM) gene, complete cds; putative protein 1 (PUT1) gene, partial cds; mitosis-specific chromosome segregation protein SMC1 homolog (SMC1) gene, complete cds; and calcium channel alpha-1 subunit
8549	21517	34936	0.58	4.1E-02	P97857	SWISSPROT	ADAM-TS 1 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 1) (ADAMTS-1) (ADAM-TS1)
8890	21956	35381	0.57	4.1E-02	P34887	SWISSPROT	CUTICLE COLLAGEN 34
9509	22472	35916	0.83	4.1E-02	AA372388.1	EST_HUMAN	EST84291 Cctn adenocarcinoma IV Homo sapiens cDNA 5' end
13013	25909	31423	4.48	4.1E-02	AJ271809.1	NT	Brassica napus gln gene for plastid glutamine synthetase, exons 1-12
13102	25925	31679	1.33	4.1E-02	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
1649	14681	27654	1.21	4.0E-02	AK675392.1	EST_HUMAN	wb88h01.x1 NCI CGAP_P28 Homo sapiens cDNA clone IMAGE:2313745 3'
3258	16312	28233	2.57	4.0E-02	AB040804.1	NT	Homo sapiens mRNA for KIAA1471 protein, partial cds
5453	18555	31468	5.39	4.0E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
6339	19408	32849	1.43	4.0E-02	BF110434.1	EST_HUMAN	7r52h07.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3588380 3' similar to TR:O75288 O75288 R28124.1;
7854	20895	34288	6.1	4.0E-02	L23838.1	NT	Strongylocentrotus purpuratus homolog of human bone morphogenetic protein 1 (subnp) mRNA, complete cds
8026	20963		0.68	4.0E-02	AL191535.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 35
8043	20980	34378	0.85	4.0E-02	AB000381.1	NT	Homo sapiens DNA for GPI-anchored molecule-like protein, complete cds
8043	20980	34377	0.85	4.0E-02	AB000381.1	NT	Homo sapiens DNA for GPI-anchored molecule-like protein, complete cds
9067	22033	35458	2.78	4.0E-02	P08840	SWISSPROT	GLUCOAMYLASE S1S2 PRECURSOR (GLUCAN 1,4-ALPHA-GLUCOSIDASE) (1,4-ALPHA-D-GLUCAN GLUCOHYDROLASE)
10002	22929		0.71	4.0E-02	BF679378.1	EST_HUMAN	602163884F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294724 5'
10027	22854	36423	2.95	4.0E-02	AJ000941.1	NT	Methanobacterium thermoautotrophicum strain Marburg, Thiol fumarate reductase subunit A
10344	23288		0.92	4.0E-02	D43949.1	NT	Human mRNA for KIAA0082 gene, partial cds
12068	24941		1.48	4.0E-02	AJ001018.1	NT	Kluyveromyces fragilis gene for Car+ ATPase
12331	25730	31614	3.62	4.0E-02	AJ001058.1	NT	Ovis aries mRNA for acetyl-coA carboxylase
1122	14166	27118	3.13	3.9E-02	BF516149.1	EST_HUMAN	UJH-BW1-arr-h-08-0-JUL1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084134 3'
1348	14383	27351	1.9	3.9E-02	P41047	SWISSPROT	FAS ANTIGEN LIGAND
1978	14959	28001	2.82	3.9E-02	AJ403386.1	NT	M.musculus DNA for desmin-binding fragment DesD7
2715	15709		2.12	3.9E-02	4508862	NT	Homo sapiens succinate dehydrogenase complex, subunit C, integral membrane protein, 15kD (SDHC) mRNA
5191	18200	31072	0.85	3.9E-02	AW382417.1	EST_HUMAN	RC8-ST0258-171189-021-C08 ST0258 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5573	18659	31630	0.74	3.9E-02	D50608.1	NT	Rat gene for cholesterylkinin type-A receptor (CCKAR), complete cds
5573	18659	31631	0.74	3.9E-02	D50608.1	NT	Rat gene for cholesterylkinin type-A receptor (CCKAR), complete cds
5820	18910	32094	1.08	3.9E-02	BE98841.1	EST_HUMAN	601649874F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3933842 5'
5957	18042	32241	0.71	3.9E-02	BF875203.1	EST_HUMAN	602138132F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274910 5'
7259	18994	33291	1.1	3.9E-02	BE271437.1	EST_HUMAN	601140729F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049890 5'
8167	21105	34504	0.53	3.9E-02	P48778	SWISSPROT	ANTIGEN GOR
8172	21142	34548	1.07	3.9E-02	BF239613.1	EST_HUMAN	601900848F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4134779 5'
8395	21394	34772	0.63	3.9E-02	AJ229041.1	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22; segment 1/3
8395	21394	34773	0.63	3.9E-02	AJ229041.1	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22; segment 1/3
11737	21105	34504	1.61	3.9E-02	P48778	SWISSPROT	ANTIGEN GOR
12184	25872		14.17	3.9E-02	AB042553.1	NT	Felis catus G-CSF gene for granulocyte colony-stimulating factor, complete cds
12849	25794		5.15	3.9E-02	AL049986.2	NT	Mus musculus chromosome X contigB; X-linked lymphocyte regulated 5 gene, Zinc finger protein 275, Zinc finger protein 92, mmmq28orf
1989	14980	27993	1.13	3.8E-02	BE865137.1	EST_HUMAN	601510891F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912215 5'
2129	15146		1.1	3.8E-02	AJ251973.1	NT	Homo sapiens partial steatrin-1 gene
4908	17923	30815	0.92	3.8E-02	BE393275.1	EST_HUMAN	601308488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3626757 5'
4908	17923	30816	0.92	3.8E-02	BE393275.1	EST_HUMAN	601308488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3626767 5'
4985	17980	30870	1.4	3.8E-02	AU124122.1	EST_HUMAN	AU124122 NT2RM2 Homo sapiens cDNA clone NT2RM2001698 5'
5515	18615	31648	1.2	3.8E-02	M11228.1	NT	Human protein C gene, complete cds
6206	18280	32513	1.04	3.8E-02	P10284	SWISSPROT	HOMEOBOX PROTEIN HOX-B4 (HOX-2.6)
7540	20503	33962	1.43	3.8E-02	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
9011	21977		1.28	3.8E-02	M50875.1	NT	Human von Willebrand factor gene, exons 23 through 34
11014	23979	37505	2.04	3.8E-02	AF143952.2	NT	Homo sapiens PELOTA (PELOTA) gene, complete cds
12009	24886	38481	1.53	3.8E-02	P01641	SWISSPROT	IG KAPPA CHAIN V-V REGION MOPC 173B PRECURSOR
12009	24888	38482	1.53	3.8E-02	P01641	SWISSPROT	IG KAPPA CHAIN V-V REGION MOPC 173B PRECURSOR
894	14045	26989	4.78	3.7E-02	P19137	SWISSPROT	LAMININ ALPHA-1 CHAIN PRECURSOR (LAMININ A CHAIN)
1389	14423	27392	0.96	3.7E-02	L14591.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
2246	15260	28287	4.98	3.7E-02	AB94806.1	EST_HUMAN	wf85e08.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2494502 3'
3063	16120	28034	1.27	3.7E-02	P79844	SWISSPROT	EMESODERMIN
3065	16122	28035	4.14	3.7E-02	BF312963.1	EST_HUMAN	601898233F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125584 5'
3468	16514		1.03	3.7E-02	6880541	NT	Mus musculus potassium large conductance pH-sensitive channel, subfamily M, alpha member 3 (Kcnma3), mRNA
5279	18285	31148	0.76	3.7E-02	AF168106.1	NT	Bubo virginianus cytochrome b gene, partial cds; mitochondrial gene for mitochondrial product

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7281	25998		0.79	3.7E-02	AF000063.1	NT	Aeropyrum pernix genomic DNA, section 617
7956	20897	34280	0.84	3.7E-02	AE003975.1	NT	Xylella fastidiosa, section 121 of 229 of the complete genome
10375	23298		0.99	3.7E-02	AA782516.1	EST_HUMAN	af55c09.s1 Soares_papillary_tumor_Nb1-PA Homo sapiens cDNA clone 13608123'
12225	25061	38828	5.94	3.7E-02	BF124974.1	EST_HUMAN	601762117F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4024973 5'
12883	25762	31520	2.34	3.7E-02	11418392	NT	Homo sapiens scute carrier family 22 (organic cation transporter), member 1 (SLC22A1), mRNA
3667	16710	29625	1.04	3.6E-02	X73221.1	NT	H. vulgare Ss1 gene for sucrose synthase
3674	16717	29631	0.75	3.6E-02	AL098806.1	NT	Homo sapiens genomic region containing hypervariable minisatellites chromosome 10[10q26.3] of Homo sapiens
5253	18261	31130	2.27	3.6E-02	AL098810.1	NT	Homo sapiens genomic region containing hypervariable minisatellites chromosome 10[10q26.3] of Homo sapiens
5501	18601	31514	0.8	3.6E-02	X59403.1	NT	C.glytamitum gap, pgk and tpi genes for glyceraldehyde-3-phosphate, phosphoglycerate kinase and triosephosphate isomerase
5501	18601	31530	0.8	3.6E-02	X59403.1	NT	C.glytamitum gap, pgk and tpi genes for glyceraldehyde-3-phosphate, phosphoglycerate kinase and triosephosphate isomerase
5578	18674	31638	0.68	3.6E-02	AF181722.1	NT	Homo sapiens RU2AS (RU2) mRNA, complete cds
6885	19918	33212	4.97	3.6E-02	AW945516.1	EST_HUMAN	CM2-EN0013-110500-182-b10 EN0013 Homo sapiens cDNA
6885	19918	33213	4.97	3.6E-02	AW945516.1	EST_HUMAN	CM2-EN0013-110500-182-b10 EN0013 Homo sapiens cDNA
7150	18382	31270	0.5	3.6E-02	U67575.1	NT	Methanococcus jannaschii section 117 of 150 of the complete genome
7291	20263	33597	1.7	3.6E-02	AF026962.1	NT	Chromatium vinosum sulfur globule protein Cx2 precursor (sgp2) gene, complete cds
7527	20491	33853	2.75	3.6E-02	AA714521.1	EST_HUMAN	nm20c05.s1 NC1_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241024 3' similar to gb:J00314_ma2
7896	20838	34218	1.08	3.6E-02	BE143078.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
9746	22687	36142	1.85	3.6E-02	U20608.1	NT	MR0-HT0158-030200-003-b08 HT0158 Homo sapiens cDNA
9746	22687	36143	1.85	3.6E-02	U20608.1	NT	Dicystostellum discoideum unknown spore germination-specific protein-like protein, orf1, orf2 and orf3 genes, complete cds
9971	22898	36361	0.68	3.6E-02	BF347588.1	EST_HUMAN	602020453F1 NC1_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4166116 5'
886	19651	28909	0.9	3.5E-02	U09506.1	NT	Drosophila melanogaster tiggerin mRNA, complete cds
1010	14059	27011	1.38	3.5E-02	AF263417.1	NT	Homo sapiens microsomal epoxide hydrolase (EPHX1) gene, complete cds
1566	14599	27574	1.3	3.5E-02	BF678085.1	EST_HUMAN	602085136F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249377 5'
1566	14599	27575	1.3	3.5E-02	BF678085.1	EST_HUMAN	602085136F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249377 5'
4241	17270	30155	1.95	3.6E-02	AE001773.1	NT	Thermotoga maritima section 85 of 136 of the complete genome
4344	17371	30253	3.67	3.5E-02	PS3780	SWISSPROT	CYSTATHIONINE BETA-LYASE PRECURSOR (CBL) (BETA-CYSTATHIONASE) (CYSTEINE LYASE)

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6265	18273		1.04	3.5E-02	P47144	SWISSPROT	HYPOTHETICAL 80.7 KD PROTEIN IN SOD1-CPA2 INTERGENIC REGION
6347	19416	32657	1.74	3.5E-02	J01238.1	NT	Maize actin 1 gene (MAc1), complete cds
6310	21279		0.78	3.5E-02	H29951.1	EST_HUMAN	yp44a05.l1 Soares retina N2b5-IR Homo sapiens cDNA clone IMAGE:180256 5' similar to contains Alu repetitive element
8870	21936	35362	2.87	3.5E-02	BE968970.1	EST_HUMAN	601644701R2 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3629737 3'
10378	23301	36777	1.99	3.5E-02	X76842.1	NT	Lactis MG1363 grfE and dnaK genes
10425	23347	36832	0.47	3.5E-02	BE561042.1	EST_HUMAN	601344661F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677654 5'
11823	24706	38268	1.61	3.5E-02	AW861641.1	EST_HUMAN	PM1-CT0328-291298-002-h03 CT0328 Homo sapiens cDNA
11823	24706	38288	1.61	3.5E-02	AW861641.1	EST_HUMAN	PM1-CT0328-291298-002-h03 CT0328 Homo sapiens cDNA
12677	25806		6.77	3.5E-02	BE276948.1	EST_HUMAN	601178765F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3543833 5'
580	13649	26562	0.91	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
580	13649	26563	0.91	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
581	13649	26562	3.42	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
581	13649	26563	3.42	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
1053	14098	27049	2.4	3.4E-02	AW274020.1	EST_HUMAN	x28407.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2814253 3' similar to
1211	14249		6.51	3.4E-02	11345458	NT	SW: C211_HUMAN_P53801 PUTATIVE SURFACE GLYCOPROTEIN C21ORF1 PRECURSOR;
2401	15408	28432	2.51	3.4E-02	T57160.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ13220 (FLJ13220), mRNA
3444	16491	29410	1.19	3.4E-02	AL163208.2	NT	yc20e08.l1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:81250 5' similar to contains
3942	16982	29897	3.71	3.4E-02	AW794952.1	EST_HUMAN	MER29 repetitive element
4628	17849	30537	3.05	3.4E-02	X59799.1	NT	Homo sapiens chromosome 21 segment HS21C008
5100	18110		2.48	3.4E-02	Q28457	SWISSPROT	RC8-UM0015-210200-021-A10 UM0015 Homo sapiens cDNA
5114	18124	30998	1.83	3.4E-02	AJ012488.1	NT	M.musculus S-antigen gene promoter region
6330	19400		0.63	3.4E-02	BF131628.1	EST_HUMAN	LA PROTEIN HOMOLOG (LA RIBONUCLEOPROTEIN) (LA AUTOANTIGEN HOMOLOG)
7032	18364	31251	3.97	3.4E-02	U24393.1	NT	Caenorhabditis elegans mRNA for DYS-1 protein, partial
8804	21572		3.14	3.4E-02	A868629.1	EST_HUMAN	601820445F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052434 5'
9100	22096	35482	1.56	3.4E-02	AA664886.1	EST_HUMAN	Human lysyl oxidase-like protein gene, exon 3
							w69a04.x1 NCJ_CGAP_Bn26 Homo sapiens cDNA clone IMAGE:2433081 3'
							nu70f08.s1 NCJ_CGAP_AVI1 Homo sapiens cDNA clone IMAGE:1218071 similar to contains Alu repetitive
							element contains element MER25 MER25 repetitive element;
							zfp04f1.1.s1 Stratagene muscle 837209 Homo sapiens cDNA clone IMAGE:828749 3' similar to
							TR:G1017425 G1017425
9268	22234		6.2	3.4E-02	AA194306.1	EST_HUMAN	IPISGKPLPKVTLSDRGVPLKATMRFNTEITAE.NLTKESVTADAGRYEITANSSGTTKAFNIVMLDRPG
10136	23062		0.64	3.4E-02	A1092719.1	EST_HUMAN	PPT GPVVISDITEESVTLKWEPPKYDGGQVNTYLLKRETSATVWTEVSATVARTMVKVVKL ...;
							cz89h08.x1 Soares_parrathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1683519 3'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
372	13458		9.24	3.3E-02	AA398735.1	EST_HUMAN	z75608.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728108 3'
1171	14212	27166	14.49	3.3E-02	AB035867.1	NT	Oribolus griseus CYP2A17 mRNA for cytochrome P450 2A17, complete cds
1645	14677	27650	1.73	3.3E-02	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
1753	14782		1.29	3.3E-02	AE000700.1	NT	Aquifex aeolicus section 32 of 109 of the complete genome
2096	15113		1.76	3.3E-02	R09112.1	EST_HUMAN	y25609.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:127888 5'
2498	15462	28485	1.31	3.3E-02	6755862	NT	Mus musculus tumor rejection antigen gp98 (Trat1), mRNA
3372	16422	28347	8.85	3.3E-02	H02389.1	EST_HUMAN	y35h02.r1 Soares placenta Nc2-IP Homo sapiens cDNA clone IMAGE:150771 5'
4208	14677	27650	2.36	3.3E-02	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
4494	17519	30407	1.81	3.3E-02	6755862	NT	Mus musculus tumor rejection antigen gp98 (Trat1), mRNA
4848	17865	30759	0.66	3.3E-02	AW275698.1	EST_HUMAN	xp-40h04.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2742799 3'
6570	19630	32893	20.14	3.3E-02	BF245885.1	EST_HUMAN	601853910F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073787 5'
6570	19630	32897	20.14	3.3E-02	BF245885.1	EST_HUMAN	601853910F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073787 5'
6677	22630	36084	0.71	3.3E-02	BF115621.1	EST_HUMAN	7m82h04.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3582423 3'
6677	22630	36085	0.71	3.3E-02	BF115621.1	EST_HUMAN	7m82h04.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3582423 3'
9779	22720	36174	0.72	3.3E-02	AA488202.1	EST_HUMAN	ea08f09.s1 Soares_NbHFB Homo sapiens cDNA clone IMAGE:877673 3' similar to gb:X70944_cds1 MYOBLAST CELL SURFACE ANTIGEN 24.1D5 (HUMAN);
9779	22720	36175	0.72	3.3E-02	AA488202.1	EST_HUMAN	ea08f09.s1 Soares_NbHFB Homo sapiens cDNA clone IMAGE:877673 3' similar to gb:X70944_cds1 MYOBLAST CELL SURFACE ANTIGEN 24.1D5 (HUMAN);
10884	23884		0.46	3.3E-02	H38109.1	EST_HUMAN	y651f11.s1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:190989 3'
11455	24398	37845	2.47	3.3E-02	BF691107.1	EST_HUMAN	602247171F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332467 6'
12425	25183		3.71	3.3E-02	T86545.1	EST_HUMAN	y649f11.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:121101 5'
12547	25270		1.69	3.3E-02	AF286665.1	NT	Mus musculus EIF4H gene, partial cds; LAMK1 gene, complete cds; and ELN gene, partial cds
12577	25286		3.04	3.3E-02	M81890.1	NT	Human Interleukin 11 (IL11) gene, complete mRNA
132	13237	26168	1.27	3.2E-02	AJ002005.1	NT	Oryctolagus cuniculus gene encoding ileal sodium-dependent bile acid transporter
1128	14171	27122	10.01	3.2E-02	AF096276.1	NT	Drosophila melanogaster heat shock protein 68 (hsp68) gene, hsp68d allele, complete cds
1128	14171	27123	10.01	3.2E-02	AF096276.1	NT	Drosophila melanogaster heat shock protein 68 (hsp68) gene, hsp68d allele, complete cds
2127	15144		3.6	3.2E-02	P28955	SWISSPROT	LARGE TEGUMENT PROTEIN
3151	16208	29122	9.61	3.2E-02	BE867553.1	EST_HUMAN	601442431F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3846727 5'
4246	17275		16.99	3.2E-02	X94768.1	NT	H. sapiens RP3 gene (XLRP gene 3)
4801	17818	30712	3.75	3.2E-02	AF114182.1	NT	Saxifraga nidifica maturase (matK) gene, chloroplast gene encoding chloroplast protein, partial cds
5303	18306		1.34	3.2E-02	Y08824.1	NT	P. falciparum mRNA for AARP2 protein
5613	18709	31866	1.56	3.2E-02	X88709.1	NT	S. griseocaneum whiG-Stv gene
5613	18709	31867	1.56	3.2E-02	X88709.1	NT	S. griseocaneum whiG-Stv gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6673	19730	33008	2.23	3.2E-02	M32437.1	NT	Rat/polyomavirus left junction in cell line W68.14
6676	19733		30.53	3.2E-02	T88387.1	EST_HUMAN	y833h12.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:110087 3' similar to contains
6763	19817	33097	4.01	3.2E-02	AF173845.1	NT	Alu repetitive element; contains LTR1 repetitive element ;
8039	20976	34372	0.82	3.2E-02	11424049	NT	Sequins oedipus tissue kallikrein gene, complete cds
8643	21811	35033	2.84	3.2E-02	6680565	NT	Homo sapiens cytochrome P450, subfamily IIB (phenobarbital-inducible) (CYP2B), mRNA
9293	22259		0.7	3.2E-02	AF109718.1	NT	Mus musculus kinesin family member 3c (Kif3c), mRNA
9580	22542	35982	1.02	3.2E-02	A1278971.1	EST_HUMAN	Homo sapiens chromosome 3 subtelomeric region
9580	22542	35983	1.02	3.2E-02	A1278971.1	EST_HUMAN	qm17b04.x1 NCI CGAP J_u5 Homo sapiens cDNA clone IMAGE:1882083 3'
10417	23339		4.18	3.2E-02	AAT19786.1	EST_HUMAN	qm17b04.x1 NCI CGAP J_u5 Homo sapiens cDNA clone IMAGE:1882083 3'
10723	23845	37138	0.98	3.2E-02	U98782.1	NT	zq54b12.s1 Soares pineal_gland_N3-HPG Homo sapiens cDNA clone IMAGE:397161 3' similar to
12812	26976		1.43	3.2E-02	V00574.1	NT	gb1.08441 CYTOCHROME C OXIDASE POLYPEPTIDE III (HUMAN);
1285	14300		2.28	3.1E-02	4503416	NT	Macaca mulatta chemokine receptor CCR5 mRNA, complete cds
1308	14344	27309	1.67	3.1E-02	P18845	SWISSPROT	Human germ line gene homologous to bladder carcinoma oncogene T24 (Gene code c-Ha-ras-1) with four exons
1909	14933	27929	1	3.1E-02	6871564	NT	Homo sapiens dual specificity phosphatase 4 (DUSP4) mRNA
1991	16012		1.18	3.1E-02	Z50087.1	NT	NEURONAL ACETYLCHOLINE RECEPTOR PROTEIN, ALPHA-3 CHAIN PRECURSOR (GF-ALPHA-3)
5338	18441	31194	1.28	3.1E-02	U78104.1	NT	Mus musculus adaptor-related protein complex AP-3, delta subunit (Ap3d), mRNA
5434	18538		2.26	3.1E-02	AA278478.1	EST_HUMAN	Drosophila melanogaster mRNA for headcase protein
5731	18826	32005	0.81	3.1E-02	BF687742.1	EST_HUMAN	Human leukemia inhibitory factor receptor (LIFR) gene, promoter and partial exon 1
5803	25845	32078	0.52	3.1E-02	AJ391284.1	NT	zs81e08.r1 NCI CGAP_G081 Homo sapiens cDNA clone IMAGE:703858 5'
10391	23313	36783	2.55	3.1E-02	AF034778.1	NT	802086783F1 NH_MGC_57 Homo sapiens cDNA clone IMAGE:4065789 5'
1827	14680		2.21	3.0E-02	AF187125.1	NT	Neisseria meningitidis DNA for region 2 (flaB- and flaC-homologs, unknown genes) and flanking genes, strain FAM18
2590	15591	28608	0.97	3.0E-02	AA02242.1	EST_HUMAN	Enterococcus faecalis surface protein precursor, gene, complete cds
3579	16824	28545	0.81	3.0E-02	M94176.1	NT	Ptyostaines minutus cytochrome oxidase I gene, partial cds; mitochondrial gene for mitochondrial product
3666	16709	28624	2.77	3.0E-02	AF247644.1	NT	z65h03.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727263 5'
3768	16799		0.98	3.0E-02	AW820223.1	EST_HUMAN	Saccharomyces cerevisiae stem-loop mutation suppressor SSL2 gene, complete cds
3969	17009		1.45	3.0E-02	AA364003.1	EST_HUMAN	Pseudomonas fluorescens family II aminotransferase gene, complete cds
5092	18102	30877	7.41	3.0E-02	AF281074.1	NT	QV2-ST0298-150200-040-e09 ST0298 Homo sapiens cDNA
5092	18102	30878	7.41	3.0E-02	AF281074.1	NT	EST74530 Pineal gland II Homo sapiens cDNA 5' end
5465	18567		2.99	3.0E-02	AB046783.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
							Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
							Homo sapiens mRNA for KIAA1573 protein, partial cds

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6363	19451	32693	0.58	3.0E-02	N98615.1	EST_HUMAN	z339a10.1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:294908 5' similar to contains element TAR1 repetitive element;
6363	19451	32694	0.58	3.0E-02	N98615.1	EST_HUMAN	z339a10.1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:294908 5' similar to contains element TAR1 repetitive element;
6957	20182	33505	3.17	3.0E-02	AJ242806.1	NT	Cytirius carpio mRNA for inducible nitric oxide synthase (iNOS gene)
7091	20025	33327	2.8	3.0E-02	BE889948.1	EST_HUMAN	601512206F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913948 5'
7091	20025	33328	2.8	3.0E-02	BE889948.1	EST_HUMAN	601512206F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913948 5'
7274	20009	33310	2.29	3.0E-02	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
7274	20009	33311	2.29	3.0E-02	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
7442	20408	33760	1.29	3.0E-02	M86524.1	NT	Human dystrophin gene
7836	20783		0.76	3.0E-02	BF246361.1	EST_HUMAN	601854981F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4074548 5'
8463	21432		0.48	3.0E-02	BF979708.1	EST_HUMAN	602154384F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295654 5'
8888	21954	33378	0.74	3.0E-02	BF353389.1	EST_HUMAN	IL5-HT0704-290600-108-c04 HT0704 Homo sapiens cDNA
9146	22111		1.62	3.0E-02	AF276654.1	NT	Omithorhynchus ornatus coagulation factor X mRNA, complete cds
10826	23747	37248	1.68	3.0E-02	AE001797.1	NT	Thromboglobulin section 109 of 136 of the complete genome
11566	24508	38063	2.38	3.0E-02	M81357.1	NT	Human coagulation factor VII (F7) gene exon 1 and factor X (F10) gene, exon 1
11987	24874	38470	7.84	3.0E-02	AA483216.1	EST_HUMAN	ne8704.81 NC1_CGAP_Kd1 Homo sapiens cDNA clone IMAGE:511283
12529	25960	31316	2.02	3.0E-02	R32019.1	EST_HUMAN	yh63d04.s1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:134407 3'
12868	25470		2.08	3.0E-02	AW865565.1	EST_HUMAN	QV4-NN0038-270400-187-405 NN0038 Homo sapiens cDNA
12808	25954		1.98	3.0E-02	AF048687.1	NT	Rattus norvegicus UDP-Gal:glucosylceramide beta-1,4-galactosyltransferase mRNA, complete cds
2442	15983	28467	1	2.9E-02	AF228703.1	NT	Homo sapiens mitochondrial glutathione reductase and cytosolic glutathione reductase (GRD1) gene, complete cds, alternatively spliced
3005	16063	28982	1.14	2.9E-02	BE66844.1	EST_HUMAN	601338428F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3680695 5'
3005	16063	28983	1.14	2.9E-02	BE66844.1	EST_HUMAN	601338428F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3680695 5'
3573	16918	29540	0.8	2.9E-02	X55294.1	NT	Sheep gene for ultra high-sulphur keratin protein
3650	16960	29508	0.72	2.9E-02	H72805.1	EST_HUMAN	yw07e10.1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:233130 5'
6181	19259	32489	1.13	2.9E-02	AF060221.1	NT	Sus scrofa deoxyribonuclease II mRNA, complete cds
6424	19401	32743	7.33	2.9E-02	BF032233.1	EST_HUMAN	601452681F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3585588 5'
7142	20119	39431	0.62	2.9E-02	AJ361284.1	NT	Neisseria meningitidis DNA for region 2 (fhaB- and fhaC-homologs, unknown genes) and flanking genes, strain FAM18
7460	20426	33782	10.95	2.9E-02	BE271437.1	EST_HUMAN	601140729F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049830 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7657	20817	33982	0.67	2.8E-02	D28214.1	EST_HUMAN	HUMNK282 Human epidermal keratinocyte Homo sapiens cDNA clone 282
8169	21107	34506	0.53	2.8E-02	AE003632.1	NT	Xyloia fasciculosa, section 78 of 228 of the complete genome
8331	21300	34718	0.83	2.8E-02	AF129278.1	NT	Buchnera aphidicola natural-host Schlechtendalla chinensis gluconate-6-phosphatase dehydrogenase (gnd) gene, partial cds
8331	21300	34717	0.83	2.8E-02	AF129278.1	NT	Buchnera aphidicola natural-host Schlechtendalla chinensis gluconate-6-phosphatase dehydrogenase (gnd) gene, partial cds
10016	22943	36408	2.28	2.8E-02	AW875978.1	EST_HUMAN	CM3-PT0014-071298-061-c04 PT0014 Homo sapiens cDNA
10016	22943	36410	2.28	2.8E-02	AW875979.1	EST_HUMAN	CM3-PT0014-071298-061-c04 PT0014 Homo sapiens cDNA
10233	23158	37127	0.67	2.8E-02	AW976697.1	EST_HUMAN	EST388708 MAGE resequences, MAGN Homo sapiens cDNA
10710	23632	37127	1.07	2.8E-02	AP000004.1	NT	Aeropyrum pernix genomis DNA, section 777
11388	16818	29540	1.6	2.8E-02	X55294.1	NT	Sheep gene for ultra high-sulphur keratin protein
12531	25870	351587.1	1.46	2.8E-02	AU135817.1	EST_HUMAN	AU135817 PLACE1 Homo sapiens cDNA clone PLACE1002862 5'
567	19337	29355	1.93	2.8E-02	AW970183.1	EST_HUMAN	EST382234 MAGE resequences, MAGN Homo sapiens cDNA
3380	16429	29355	1.27	2.8E-02	AF066063.1	NT	Homo sapiens retinal fascic (FSCN2) gene, exon 2
3380	16429	29358	1.27	2.8E-02	AF066063.1	NT	Homo sapiens retinal fascic (FSCN2) gene, exon 2
4341	17368		0.67	2.8E-02	8388751	NT	Rattus norvegicus microtubule-associated protein tau (Mapt), mRNA
5206	18215	31080	3.2	2.8E-02	N87073.1	EST_HUMAN	L2083F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone L2083 5' similar to TRNA-
5294	18289		0.93	2.8E-02	M59493.1	NT	GUANINE TRANSGLYCOSYLASE
5565	18662	31622	10.89	2.8E-02	BE741083.1	EST_HUMAN	Dengue virus type 2 non-structural protein 1 (NS1) gene, partial cds
6881	20204	33533	1.13	2.8E-02	T78860.1	EST_HUMAN	601594078F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3848057 5'
8671	21639	35063	2.24	2.8E-02	AJ006820.1	NT	y421D08.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108855 5'
9371	22336	35766	0.82	2.8E-02	AA280762.1	EST_HUMAN	Craterosigma plantagineum mRNA for homeodomain leucine zipper protein (hb-1)
9563	22525	35974	1.03	2.8E-02	AF187872.1	NT	zs98c08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711468 5'
9687	22820	36071	0.71	2.8E-02	AE001092.1	NT	Cavia porcellus inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, complete cds
10880	23900	37413	0.42	2.8E-02	BF627244.1	EST_HUMAN	Archaeoglobus fulgidus section 15 of 172 of the complete genome
12809	25301		1.6	2.8E-02	R06988.1	EST_HUMAN	60239477F2 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4177287 5'
12816	26438		1.57	2.8E-02	X06322.1	NT	y12h02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128675 5'
							Yeast CN31C chromosome III RAHS DNA (right arm transcription hot-spot)
							Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV6S1A1T, TCRBV7S1A1N2T, TCRBV6S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
1485	14518	27491	1.07	2.7E-02	U6659.1	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 6
3445	18492	29411	1.88	2.7E-02	AL161494.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 6
4230	17259	30143	2.01	2.7E-02	N47258.1	EST_HUMAN	y68h112.1 Soares multiple sclerosis 2NblMSP Homo sapiens cDNA clone IMAGE:280487 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4230	17269	30144	2.01	2.7E-02	N47258.1	EST_HUMAN	y88h12.r1 Scores_multiple_sclerosis_2NBHMSP Homo sapiens cDNA clone IMAGE:280487 5'
5319	19425	31176	0.52	2.7E-02	BF245672.1	EST_HUMAN	601804811F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083075 5'
5516	18616	31549	1.09	2.7E-02	R12246.1	EST_HUMAN	y433d109.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128857 5' similar to SP-JC2284 JC2284 TISSUE FACTOR PATHWAY INHIBITOR - RHESUS ;
6005	19088	32288	0.68	2.7E-02	X81870.1	NT	T.aestivum p1TH20 mRNA for wheat type V thionin
6087	19167	32379	0.51	2.7E-02	AB004789.1	NT	Oryza sativa mRNA for ascorbate oxidase, partial cds
6764	19808		1.03	2.7E-02	X87680.1	NT	A.bisporus pgkA gene
7289	20004	33304	1.93	2.7E-02	AA893571.1	EST_HUMAN	cb8h03.s1 Scores_total_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1824681 3'
8140	21077		0.53	2.7E-02	AK024458.1	NT	Homo sapiens mRNA for FLJ00048 protein, partial cds
8160	21068	34497	0.59	2.7E-02	8266542	NT	Mus musculus G21 protein (G21), mRNA
8697	21065		1.23	2.7E-02	AI377036.1	EST_HUMAN	tc28g08.x1 Scores_total_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:2065982 3' similar to contains Alu repetitive element;
573	13642	26556	1.25	2.6E-02	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
2374	15382	28404	2.54	2.6E-02	AA490021.1	EST_HUMAN	ab02b02.s1 Stratiene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838556 3'
2376	15384	28406	3.05	2.6E-02	6754241	NT	Mus musculus histidine rich calcium binding protein (Hrc), mRNA
2378	15384	28407	3.05	2.6E-02	6754241	NT	Mus musculus histidine rich calcium binding protein (Hrc), mRNA
2928	15984		1.52	2.6E-02	AF109906.1	NT	Mus musculus MHC class III region RD gene, partial cds; Bf, C2, G9A, NG22, G9, HSP70, HSP70, HSC70, and smRNP genes, complete cds; G7A gene, partial cds; and unknown genes
3088	17028		0.91	2.6E-02	AW181945.1	EST_HUMAN	x88f08.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2662409 3'
4942	17958	30848	3.25	2.6E-02	L12032.1	NT	Chicken dorsalin-1 mRNA, complete cds
5104	18114	30987	1.8	2.6E-02	AE002014.1	NT	Deinococcus radiodurans R1 section 151 of 228 of the complete chromosome 1
6128	18137	31014	3.05	2.6E-02	AW241154.1	EST_HUMAN	xa52b04.x1 NCI CGAP_Sar4 Homo sapiens cDNA clone IMAGE:2570383 3' similar to SW:Y0689_HUMAN
5944	19030		0.8	2.6E-02	AW241154.1	EST_HUMAN	Q15041 HYPOTHETICAL PROTEIN KIAA0069 ;
5982	19078		0.55	2.6E-02	AL161563.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 63
6345	19414		6.36	2.6E-02	AL206030.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 63
6595	19625	32890	1.88	2.6E-02	BE621748.1	EST_HUMAN	q827711.x1 NCI CGAP_Ki63 Homo sapiens cDNA clone IMAGE:1762317 3'
7001	20127	33441	0.82	2.6E-02	Z89094.1	NT	601493473T1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895578 3'
7001	20127	33442	0.82	2.6E-02	Z89094.1	NT	Vaccinia virus ORF1L, strain Wyeath
7095	20029	33333	6.03	2.6E-02	6961271	NT	Vaccinia virus ORF1L, strain Wyeath
7516	20481	33842	0.55	2.6E-02	P21894	SWISSPROT	Rattus norvegicus Nerve growth factor receptor, fast (Ngfr), mRNA
8850	21817	35237	0.71	2.6E-02	AA860948.1	EST_HUMAN	ALANYL-TRNA SYNTHETASE (ALANINE-TRNA LIGASE) (ALARS)
9715	22743	36194	1.27	2.6E-02	11432020	NT	ak22704.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1406719 3'
							Homo sapiens KIAA1070 protein (KIAA1070), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10072	22889	39468	0.7	2.6E-02	AF114952.1	NT	Saccharomyces dairenensis NRRL Y-12839(T) ATP synthase subunit 9 (ATP9) gene, mitochondrial gene encoding mitochondrial protein, complete cds
10072	22889	39469	0.7	2.6E-02	AF114952.1	NT	Saccharomyces dairenensis NRRL Y-12839(T) ATP synthase subunit 9 (ATP9) gene, mitochondrial gene encoding mitochondrial protein, complete cds
10768	23689	37188	4.31	2.6E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
11717	24680		2.02	2.6E-02	AA278351.1	EST_HUMAN	ze84c02.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704182 5'
11889	24770	38359	1.61	2.6E-02	AW500547.1	EST_HUMAN	UI-HF-BNO-a9-e-10-Q-ULr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077468 5'
12457	25944	31313	1.98	2.6E-02	BF343827.1	EST_HUMAN	602015501F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4150944 5'
533	13604	26522	1.85	2.5E-02	A1783130.1	EST_HUMAN	on2806.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1557827 5'
533	13604	26523	1.85	2.5E-02	A1783130.1	EST_HUMAN	on2806.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1557827 5'
810	13688	26817	9.19	2.5E-02	BE974314.1	EST_HUMAN	601680305F2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950985 3'
870	13928	26884	6.9	2.5E-02	BE974314.1	EST_HUMAN	601680305F2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950985 3'
2773	15765		2.28	2.5E-02	U12571.1	NT	Rattus norvegicus rabphilin-3A mRNA, complete cds
2868	16026	28949	3.43	2.5E-02	X98697.1	NT	H. carterae mRNA for fucosyltransferase chlorophyll a/c binding protein, Fcp1
2868	16026	28950	3.43	2.5E-02	X98697.1	NT	H. carterae mRNA for fucosyltransferase chlorophyll a/c binding protein, Fcp1
4075	18316	30005	1.02	2.5E-02	BE701165.1	EST_HUMAN	PM2-NN0128-080700-001-a12 NN0128 Homo sapiens cDNA
4075	18316	30006	1.02	2.5E-02	BE701165.1	EST_HUMAN	PM2-NN0128-080700-001-a12 NN0128 Homo sapiens cDNA
4233	17282	30146	6.52	2.5E-02	AW582114.1	EST_HUMAN	ht36108.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834015 3'
5789	18891	32073	0.66	2.6E-02	A1732776.1	EST_HUMAN	z683c10.x5 Soares ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:810384 3'
6317	19388		4.71	2.5E-02	BE670128.1	EST_HUMAN	7630e08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284008 3' similar to contains L1.1 L1 repetitive element
6334	19403		4.42	2.6E-02	BE746888.1	EST_HUMAN	601578393F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928054 5'
6470	19535	32783	0.97	2.6E-02	L28029.1	NT	Chlamydomonas reinhardtii VSP-3 mRNA, complete cds
7927	20870	34258	1.48	2.5E-02	BF626722.1	EST_HUMAN	602070562F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4213406 5'
7927	20870	34259	1.48	2.5E-02	BF626722.1	EST_HUMAN	602070562F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4213406 5'
8137	21074	34474	0.54	2.5E-02	AF129458.1	NT	Chlamydomonas reinhardtii class II DNA photolyase (PHR2) gene, complete cds
9177	22143	35570	0.82	2.5E-02	Q81713	SWISSPROT	CHORDIN PRECURSOR (ORGANIZER-SPECIFIC SECRETED DORSALIZING FACTOR)
9315	22280	35710	0.46	2.5E-02	AW025821.1	EST_HUMAN	wu08c10.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2516370 3'
10426	23348		0.65	2.6E-02	X71303.1	NT	D. radiatum 28S ribosomal RNA, D2 domain
10947	23987	37381	0.67	2.5E-02	A1147615.1	EST_HUMAN	qb22a08.x1 Soares pregnant uterus NBHPU Homo sapiens cDNA clone IMAGE:1896982 3'
11161	24119	37846	2.15	2.5E-02	Q10335	SWISSPROT	HYPOTHETICAL 46.7 KD PROTEIN C19G10.05 IN CHROMOSOME I
11161	24119	37847	2.15	2.5E-02	Q10335	SWISSPROT	HYPOTHETICAL 46.7 KD PROTEIN C19G10.05 IN CHROMOSOME I

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11227	24180		3.01	2.9E-02	AF050157.1	NT	Mus musculus major histocompatibility locus class II region: major histocompatibility protein class II alpha chain (Aalpha) and major histocompatibility protein class II beta chain (Ibeta) genes, complete cds;
12059	24932		1.47	2.9E-02	AB007548.1	NT	butyrophilin-like (NG9), butyrophilin-B
12416	26886		3.35	2.9E-02	11420078	NT	Homo sapiens gene for LECT2, complete cds
12598	25751		1.47	2.9E-02	11433220	NT	Homo sapiens similar to ALEX3 protein (H. sapiens) (LOC83634), mRNA
12698	25353		2.24	2.9E-02	U60169.1	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
12709	25365	31770	3.42	2.9E-02	BE979327.1	EST_HUMAN	Dicotyledon discoidium putative protein kinase MicaA (mcaA) gene, complete cds
175	13276	26203	0.69	2.4E-02	AB78592.1	EST_HUMAN	601652365R2 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935513 3'
1802	14634	27810	2.24	2.4E-02	H65894.1	EST_HUMAN	tc72cd07.x1 Scores_NHIMP1_S1 Homo sapiens cDNA clone IMAGE:2070156 3'
2060	16884	28098	1.73	2.4E-02	P01901	SWISSPROT	y75ff11.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:211149 5'
2060	15884	28099	1.73	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
4398	17424	30308	1.43	2.4E-02	J05110.1	NT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
4849	17572	30481	1.43	2.4E-02	P01901	SWISSPROT	T. thermophila calcium-binding 25 kDa (TCBP 25) protein mRNA, complete cds
4549	17572	30482	1.43	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
5227	18235		0.9	2.4E-02	AL101585.2	NT	Arabidopsis thaliana DNA chromosome 4, coding fragment No. 91
6340	19409	32650	0.97	2.4E-02	W86680.1	EST_HUMAN	zh63h04.s1 Scores_fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:416761 3'
8498	19560	32811	0.65	2.4E-02	M31650.1	NT	Chicken myristoylated alanine-rich C kinase substrate (MARCKS) mRNA, complete cds
8498	19560	32812	0.65	2.4E-02	M31650.1	NT	Chicken myristoylated alanine-rich C kinase substrate (MARCKS) mRNA, complete cds
7431	20398	33750	1.38	2.4E-02	Z20573.1	EST_HUMAN	HSAAACKVX T, Human adult Rhabdomyosarcoma cell-line Homo sapiens cDNA
7448	20414	33767	1.05	2.4E-02	X12925.1	NT	Rat gene for uncoupling protein (UCP)
7448	20414	33768	1.05	2.4E-02	X12925.1	NT	Rat gene for uncoupling protein (UCP)
8159	21097	34495	0.52	2.4E-02	P98092	SWISSPROT	HEMOCYTIN PRECURSOR (HUMORAL LECTIN)
8159	21097	34498	0.52	2.4E-02	P98092	SWISSPROT	HEMOCYTIN PRECURSOR (HUMORAL LECTIN)
8222	21191		0.57	2.4E-02	AW813007.1	EST_HUMAN	RC3-STO188-230300-019-H08 ST0188 Homo sapiens cDNA
8275	21244		0.58	2.4E-02	M16780.1	NT	Human retrotransposon 3' long terminal repeat
8784	21751		0.53	2.4E-02	H78376.1	EST_HUMAN	y41205.s1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:233578 3' similar to contains Alu repetitive element; contains A3R repetitive element ;
8876	21843	35285	11.43	2.4E-02	N89442.1	EST_HUMAN	z835g11.s1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284593 3' similar to
9338	22303	35731	0.49	2.4E-02	AE001125.1	NT	gbj002099RA TSK7K Rat (RNA); contains A3R Lb1 A3R repetitive element ;
							Borrelia burgdorferi (section 11 of 70) of the complete genome
							z191c06.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:745354 3' similar to gb:J04422 ISLET
9363	22328	35757	0.81	2.4E-02	AA625680.1	EST_HUMAN	AMYLOID POLYPEPTIDE PRECURSOR (HUMAN); contains Alu repetitive element; contains element XTR XTR repetitive element ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10050	22877	36443	0.46	2.4E-02	AF124160.1	NT	Arabidopsis thaliana methylglutamine synthase sulphydrylase (crds) gene, complete cds
10050	22877	36444	0.46	2.4E-02	AF124160.1	NT	Arabidopsis thaliana methylglutamine synthase sulphydrylase (crds) gene, complete cds
10165	23090	36568	2.57	2.4E-02	AV682854.1	EST_HUMAN	AV682854 GKX Homo sapiens cDNA clone GKCDSC03 5'
10340	23284	36743	2.76	2.4E-02	AA463894.1	EST_HUMAN	nh07b12.s1 NCI_CGAP_Thyl Homo sapiens cDNA clone IMAGE:943583 similar to contains Alu repetitive element; contains element PTR5 repetitive element;
10976	23866		1.35	2.4E-02	BE387111.1	EST_HUMAN	601274962F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615902 5'
11900	24781	38368	1.81	2.4E-02	AF109905.1	NT	Mus musculus major histocompatibility locus class III regions Hsc70i gene, partial cds; smRNP, G7A, NG23, MuS homolog, CLCP, NG24, NG25, and NG26 genes, complete cds; and unknown genes
11900	24781	38368	1.81	2.4E-02	AF109905.1	NT	Mus musculus major histocompatibility locus class III regions Hsc70i gene, partial cds; smRNP, G7A, NG23, MuS homolog, CLCP, NG24, NG25, and NG26 genes, complete cds; and unknown genes
12209	25050		2.39	2.4E-02	9627909	NT	Bacteriophage b167, complete genome
12963	26162	31855	1.7	2.4E-02	6763636	NT	Mus musculus DnB homolog 1 (E. coli) (DnB1), mRNA
12418	25188	31823	3.48	2.4E-02	BE928868.1	EST_HUMAN	MRO-F10175-310800-202-e06 F10175 Homo sapiens cDNA
12474	25222	31791	1.59	2.4E-02	U78167.1	NT	Rattus norvegicus cAMP-regulated guanine nucleotide exchange factor I (cAMP-GEFI) mRNA, complete cds
12474	25222	31833	1.59	2.4E-02	U78167.1	NT	Rattus norvegicus cAMP-regulated guanine nucleotide exchange factor I (cAMP-GEFI) mRNA, complete cds
12843	26327		7.88	2.4E-02	AB000659.1	NT	cds
1888	14913		5.26	2.3E-02	W05340.1	EST_HUMAN	za84g08.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:298294 5'
1904	14928		8.44	2.3E-02	U94165.1	NT	4 Homo sapiens mammary tumor-associated protein INT6 (INT6) gene, exon 4
2958	15366	28388	3.16	2.3E-02	Z74283.1	NT	S.cerevisiae chromosome IV reading frame ORF YDL245c
3694	16737	29650	4.2	2.3E-02	Z20377.1	EST_HUMAN	HSAAACADH.P, Human fetal Brain Whole tissue Homo sapiens cDNA
4178	17207	30093	0.8	2.3E-02	L24789.1	NT	Gallus gallus conradin 45.6 (Cx45.6) gene, complete cds
4178	17207	30094	0.8	2.3E-02	L24789.1	NT	Gallus gallus conradin 45.6 (Cx45.6) gene, complete cds
4450	17476	30364	1.52	2.3E-02	AW889107.1	EST_HUMAN	CNA4-NN0080-280400-160-b04 NN0080 Homo sapiens cDNA
4477	17503	30368	0.78	2.3E-02	BE935225.1	EST_HUMAN	CNA3-MT0118-010900-318-g07 MT0118 Homo sapiens cDNA
4477	17503	30368	0.78	2.3E-02	BE935225.1	EST_HUMAN	CNA3-MT0118-010900-318-g07 MT0118 Homo sapiens cDNA
4478	18317	30390	1.23	2.3E-02	AW593683.1	EST_HUMAN	xa25cd08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2770671 3'
4478	18317	30391	1.23	2.3E-02	AW593683.1	EST_HUMAN	xa25cd08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2770671 3'
4625	17846	30534	2.89	2.3E-02	BF028487.1	EST_HUMAN	601672278F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955388 5'
4625	17846	30535	2.89	2.3E-02	BF028487.1	EST_HUMAN	601672278F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955388 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5203	18212	31086	1.19	2.3E-02	AF257110.1	NT	Rattus norvegicus guanine nucleotide binding protein gamma subunit 11 mRNA, complete cds
5203	18212	31087	1.19	2.3E-02	AF257110.1	NT	Rattus norvegicus guanine nucleotide binding protein gamma subunit 11 mRNA, complete cds
5449	18581	31463	3.35	2.3E-02	U86303.1	NT	Caulobacter crescentius topoisomerase IV ParE subunit (parE) gene, complete cds, and propionyl-CoA carboxylase beta chain (pcdB) homolog gene, partial cds
6363	19432	32675	0.65	2.3E-02	BF106484.1	EST_HUMAN	5018228221R1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042829 3'
6774	19829	33112	4.22	2.3E-02	AL161605.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 17
7172	18403	31201	0.84	2.3E-02	BE141475.1	EST_HUMAN	MR0-HT0080-011089-002-c08 HT0080 Homo sapiens cDNA
7695	20653	34016	0.52	2.3E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
8208	21178	34698	6.66	2.3E-02	U63610.1	NT	Human plectin (PLECT) gene, exons 3-32, and complete cds
8815	21782	35207	0.87	2.3E-02	AJ298105.1	NT	Homo sapiens PDX1 gene for lipoyl-containing component X, exons 1-11
8815	21782	35208	0.87	2.3E-02	AJ298105.1	NT	Homo sapiens PDX1 gene for lipoyl-containing component X, exons 1-11
9044	22010	35431	0.74	2.3E-02	AK85390.1	EST_HUMAN	wa78h10.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2302147 3'
9044	22010	35432	0.74	2.3E-02	AK85390.1	EST_HUMAN	wa78h10.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2302147 3'
9463	22457	35867	0.89	2.3E-02	P41698	SWISSPROT	HYPOTHETICAL 55.6 KD PROTEIN B0280.5 IN CHROMOSOME III PRECURSOR
10218	23143	36632	0.77	2.3E-02	P50532	SWISSPROT	CHROMOSOME ASSEMBLY PROTEIN XCAP-C
10380	23312	36761	1.47	2.3E-02	AE000189.1	NT	Escherichia coli K-12 MG1655 section 89 of 400 of the complete genome
10380	23312	36762	1.47	2.3E-02	AE000189.1	NT	Escherichia coli K-12 MG1655 section 89 of 400 of the complete genome
11135	24095	37624	1.71	2.3E-02	P08640	SWISSPROT	GLUCOAMYLASE S1/S2 PRECURSOR (GLUCAN 1,4-ALPHA-GLUCOSIDASE)(1,4-ALPHA-D-GLUCAN GLUCOHYDROLASE)
12336	25738		7.99	2.3E-02	BE278331.1	EST_HUMAN	601178968F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3546567 5'
12742	25392	31755	1.5	2.3E-02	BF528462.1	EST_HUMAN	602043628F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4181454 5'
12742	25392	31756	1.5	2.3E-02	BF528462.1	EST_HUMAN	602043628F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4181454 5'
12843	25453	31724	3.2	2.3E-02	U39394.1	NT	Streptomyces sp. alpha-1,3/4-fucosidase precursor gene, complete cds
12887	25983		2.48	2.3E-02	U11077.1	NT	Dichoselium discoideum extracellular signal-regulated protein kinase (ERK1) mRNA, complete cds
13100	25853		1.82	2.3E-02	11426388	NT	Homo sapiens dead finger (Drosophila)-like 1 (DRIL1), mRNA
739	13800	26739	4.3	2.2E-02	AF018287.1	NT	Columba livia nucleoside diphosphate kinase (NDPK) gene, nuclear gene encoding mitochondrial protein, complete cds
1762	14791		1.59	2.2E-02	4557448	NT	Homo sapiens chromodomain helicase DNA binding protein 2 (CHD2) mRNA
2031	15050	28065	1.68	2.2E-02	Z82001.1	NT	S. pneumoniae pcgA gene and open reading frames
3448	15495		2.15	2.2E-02	AA677785.1	EST_HUMAN	nt24804.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084782 3'
3660	16703		3.48	2.2E-02	AF083094.1	NT	Infectious bursal disease virus segment B strain IL4 VP1 gene, complete cds
3867	16906	29814	1.26	2.2E-02	AW601317.1	EST_HUMAN	PM0-BT0340-170100-004-003 BT0340 Homo sapiens cDNA
3941	16981	29896	0.74	2.2E-02	Z74293.1	NT	S. cerevisiae chromosome IV reading frame ORF YDL245c

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5105	18115	30688	1.17	2.2E-02	Z73597.1	NT	S.cerevisiae chromosome XVI reading frame ORF YPL241c
7458	20424	33780	3.37	2.2E-02	AV689721.1	EST_HUMAN	AV689721 GKB Homo sapiens cDNA clone GKBA003 3'
8714	21882	35109	2.28	2.2E-02	AL161515.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 27
8714	21882	35110	2.28	2.2E-02	AL161515.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 27
9161	22127	35555	0.77	2.2E-02	X79498.1	NT	P. vulgata alpha tub 2 mRNA
10045	22972	38438	2.28	2.2E-02	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10045	22972	38439	2.28	2.2E-02	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10565	23487		0.91	2.2E-02	6878140	NT	Mus musculus Sjogren syndrome antigen A1 (Ssa1), mRNA
11540	24481	38033	1.8	2.2E-02	BE797801.1	EST_HUMAN	601584308F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3838571 5'
12602	26304		6.72	2.2E-02	AA503553.1	EST_HUMAN	ne47n07.s1 NCI_CGAP_Co8 Homo sapiens cDNA clone IMAGE:900541 3' similar to contains Alu repetitive element;
419	13482		5.37	2.1E-02	AV761502.1	EST_HUMAN	AV761502 MDS Homo sapiens cDNA clone MDSADG01 5'
449	13522		8.77	2.1E-02	AF029728.1	NT	Diclyostelium discoideum histidine kinase C (dhkC) mRNA, complete cds
1268	14303	27284	8.3	2.1E-02	U72073.1	NT	Bacillus subtilis cotKLM cluster, CotK (cotK), and spore coat protein CotM (cotM) genes, complete cds
1387	14420	27389	0.99	2.1E-02	AF204395.1	NT	Mus musculus macrophage migration inhibitory factor (MIF) gene, 5' flanking region and partial cds
1387	14420	27390	0.99	2.1E-02	AF204395.1	NT	Mus musculus macrophage migration inhibitory factor (MIF) gene, 5' flanking region and partial cds
1797	14828	27811	1.26	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
1797	14828	27812	1.26	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
1797	14828	27813	1.26	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
1880	15001	28004	1.01	2.1E-02	AF180898.1	NT	Tegula aureodincta major acrosomal protein precursor (TMAP) mRNA, complete cds
2050	15069	28089	0.9	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0548-120100-001-f11 BT0548 Homo sapiens cDNA
2050	15069	28090	0.9	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0548-120100-001-f11 BT0548 Homo sapiens cDNA
2591	15892	28609	1.04	2.1E-02	AA225095.1	EST_HUMAN	nc21g03.t1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008820
2827	13839	28784	4.45	2.1E-02	N28286.1	EST_HUMAN	yc43h07.t1 Soares melanocyte 2NHIM Homo sapiens cDNA clone IMAGE:284541 5'
3184	15069	28089	1.02	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0548-120100-001-f11 BT0548 Homo sapiens cDNA
3184	15069	28090	1.02	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0548-120100-001-f11 BT0548 Homo sapiens cDNA
3597	16842	29581	0.98	2.1E-02	AA461271.1	EST_HUMAN	z683h09.t1 Soares fetal Nb2Hf8 sw Homo sapiens cDNA clone IMAGE:786121 5'
4028	17088	29867	0.97	2.1E-02	BF203457.1	EST_HUMAN	601865890F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4098407 5'
4157	17188	30076	0.64	2.1E-02	Z74283.1	NT	S.cerevisiae chromosome IV reading frame ORF YDL245c
4339	17368	30249	1.4	2.1E-02	BF549855.1	EST_HUMAN	602015306F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4161161 5'
4473	17499	30384	2.15	2.1E-02	U44914.1	NT	Borrelia burgdorferi plasmid cp32-2, erpC and erpD genes, complete cds; and unknown genes

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4483	17508	30397	1.13	2.1E-02	AI768127.1	EST_HUMAN	wg81d11.x1 Soares NSF_F8_GW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371509 3'
4739	17769	30654	5.69	2.1E-02	Y0801.1	NT	A.thaliana mitochondrial genome, part A
4761	17761	30677	1.5	2.1E-02	AA665737.1	EST_HUMAN	ag55g12.s1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1126918 3'
5256	18264	31133	1.07	2.1E-02	BF028405.1	EST_HUMAN	601671411F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3964410 5'
5723	18817	31098	0.75	2.1E-02	AW378529.1	EST_HUMAN	CMA-H10244-111189-040-H05 HT0244 Homo sapiens cDNA
7268	20003	33303	0.65	2.1E-02	BF085199.1	EST_HUMAN	QV3-GN0058-120900-329-812 GN0058 Homo sapiens cDNA
8884	21831	35284	0.66	2.1E-02	9780238	NT	Mus musculus sorting nexin 1 (Snx1), mRNA
9881	22797	36250	0.51	2.1E-02	AA984288.1	EST_HUMAN	am83d07.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1629732 3' similar to contains
9889	22916	36381	2.63	2.1E-02	AI243213.1	NT	Alu repetitive element contains element MER11 repetitive element;
9889	22916	36382	2.63	2.1E-02	AI243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
10343	23267	36746	1.13	2.1E-02	L29324.1	NT	Homo sapiens partial 6-HT4 receptor gene, exons 2 to 5
10421	23343	36829	0.86	2.1E-02	AA984288.1	EST_HUMAN	Streptococcus pneumoniae integrase, excisionase, repressor protein, relaxase, UmuC MucB homolog, and
12584	18345	31617	8.95	2.1E-02	Y18213.1	NT	UmuD MucA homolog genes, complete cds; and unknown genes
12624	25735	31617	1.4	2.1E-02	L34170.1	NT	am83d07.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1629732 3' similar to contains
13003	25557	31683	3.5	2.1E-02	AF163913.1	NT	Alu repetitive element contains element MER11 repetitive element;
19	13139	28037	1.39	2.0E-02	BF002932.1	EST_HUMAN	Homo sapiens putative psbH1bA pseudogene for hair keratin, exons 2 to 7
20	13140	28038	10.76	2.0E-02	AW585965.1	EST_HUMAN	Human germline UBE1L gene similar to the gene for ubiquitin-activating enzyme, exons 1-22
259	13356	28280	3.29	2.0E-02	6753635	NT	Azospirillum brasilense major outer membrane protein OmsA precursor (omsA) gene, complete cds
295	13389	26317	2.85	2.0E-02	AA456638.1	EST_HUMAN	7g51c08.x1 NCJ_CGAP_P728 Homo sapiens cDNA clone IMAGE:3309898 3' similar to contains MER1.t3
789	13838	26805	1.27	2.0E-02	6753635	NT	MER1 repetitive element;
1089	14153	27085	1.03	2.0E-02	AL056805.1	NT	QV4-NN0038-270400-187-H05 NN0038 Homo sapiens cDNA
1204	14243	27201	0.79	2.0E-02	8822391	NT	Mus musculus Dmb homolog 1 (E. coli) (Dmb1), mRNA
1204	14243	27202	0.79	2.0E-02	8822391	NT	ea16b10.r1 Soares NIHMPU_S1 Homo sapiens cDNA clone IMAGE:813307 5'
1890	14915	27809	2.08	2.0E-02	8822453	NT	Mus musculus Dmb homolog 1 (E. coli) (Dmb1), mRNA
1890	14915	27910	2.08	2.0E-02	8822453	NT	Homo sapiens genomic region containing hypervariable minisatellite chromosome 1(p38.33) of Homo sapiens
2810	15802		4.57	2.0E-02	AL161532.2	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
3086	13139	28037	1.61	2.0E-02	BF002932.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
							Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
							Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
							Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
							Arabidopsis thaliana DNA chromosome 4, contig fragment No. 32
							7g51c08.x1 NCJ_CGAP_P728 Homo sapiens cDNA clone IMAGE:3309898 3' similar to contains MER1.t3
							MER1 repetitive element;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3159	18215		1.83	2.0E-02	7305474	NT	Mus musculus sema domain, transmembrane domain (TM), and cytoplasmic domain, (sema3phorm) 68 (Sema3b), mRNA
3241	18286		1.8	2.0E-02	AF055988.1	NT	Arabidopsis thaliana C2H2 zinc finger protein FZF mRNA, complete cds
4032	17070	29971	1.4	2.0E-02	M18095.1	NT	P. vulgaris hydroxyproline-rich glycoprotein (HRGP) mRNA, 3' end
5163	18163		0.7	2.0E-02	A1271895.1	EST_HUMAN	q83e03.x1 NCI CGAP_K043 Homo sapiens cDNA clone IMAGE:1868076 3'
5175	18184	31081	0.94	2.0E-02	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C0078
5718	18812	31991	0.59	2.0E-02	U34778.1	NT	Ceenorhabditis elegans sma-2 mRNA, complete cds
6000	19083	32282	0.73	2.0E-02	L36321.2	NT	Dicystostelium discoideum class VII unconventional myosin (myoI) gene, complete cds
7789	20751	34126	1.09	2.0E-02	AF000004.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 777001-894000 nt position (4/7)
7799	20751	34127	1.09	2.0E-02	AF000004.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 777001-894000 nt position (4/7)
10236	23161		1.89	2.0E-02	U70408.1	NT	Japanese encephalitis virus envelope protein mRNA, partial cds
10726	23648	37141	1.54	2.0E-02	A1949342.1	EST_HUMAN	wa17502.x1 NCI CGAP_K1011 Homo sapiens cDNA clone IMAGE:2288315 3'
11005	23971	37495	1.84	2.0E-02	Z79988.1	NT	Mycobacterium tuberculosis H37Rv complete genome, segment 93/182
11699	24684	38241	2.28	2.0E-02	D88184.1	NT	Equus caballus DNA for 17alpha-hydroxylase/17,20-lyase, complete cds
12148	18351	31298	3.03	2.0E-02	AA456538.1	EST_HUMAN	aa15b10.1 Soares NIH-IMPu_S11 Homo sapiens cDNA clone IMAGE:813307 5'
12821	15802		1.99	2.0E-02	AL161532.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 32
13076	25608		3.4	2.0E-02	T60037.1	EST_HUMAN	yc04c09.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:24675 5'
694	13756	26886				EST_HUMAN	rf19a07.s1 NCI CGAP_P11 Homo sapiens cDNA clone IMAGE:914188 similar to contains L1.L1 L1 repetitive element:
1619	14652	27628	1.03	1.9E-02	AA572784.1	EST_HUMAN	EMPTY SPIRACLES HOMEOTIC PROTEIN
2055	15074	28083	3.04	1.9E-02	P18488	SWISSPROT	Homo sapiens chromosome 21 segment HS21C103
2055	15074	28094	3.04	1.9E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2514	15517	28540	1.07	1.9E-02	AL161550.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 50
2916	15874	28897	8.5	1.9E-02	AA713858.1	EST_HUMAN	mw04f05.at NCI CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238837 3'
2984	18022	28947	1.48	1.9E-02	AV648689.1	EST_HUMAN	AV648689 GLC Homo sapiens cDNA clone GLOBLH07 3'
3273	18327		0.72	1.9E-02	AB033611.1	NT	Utricularia tepaloides mitochondrial gene for cytochrome b, complete cds
3626	16688		1.36	1.9E-02	N62250.1	EST_HUMAN	yz28b02.x1 Soares multiple sclerosis 2N14-MSP Homo sapiens cDNA clone IMAGE:284331 3'
3718	16761		8.23	1.9E-02	BE738088.1	EST_HUMAN	601572882F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:3838584 5'
3727	16789	29881				EST_HUMAN	qn04c07.x1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1897260 3' similar to contains Alu repetitive element:
4071	17112	30008	1.59	1.9E-02	AF141840.1	NT	Mycoplasma imitans Vha1 precursor (Vha1) and Vha2 precursor (Vha2) genes, partial cds
4222	17251	30137	1.82	1.9E-02	P08081	SWISSPROT	HOMEOTIC BICOID PROTEIN (PRD-4)
4222	17251	30138	1.82	1.9E-02	P08081	SWISSPROT	HOMEOTIC BICOID PROTEIN (PRD-4)

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4572	17594	30488	3.85	1.9E-02	AF452989.1	EST_HUMAN	y46d04.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2144651 3' similar to contains Alu repetitive element;
5048	15517	28540	2.68	1.9E-02	AL181550.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 50
5389	19492	31369	0.91	1.9E-02	AF037352.1	NT	Mus musculus T cell receptor gamma locus, TCR gamma 1 and gamma 3 gene clusters
5544	18841	31581	1.25	1.9E-02	U47572.1	NT	Meleagris gallopavo paraoxanase-2 (PON2) mRNA, complete cds
5885	18874		1.24	1.9E-02	AB019507.1	NT	Drosophila karateki gene for glycerol-3-phosphate dehydrogenase, complete cds
7308	20279	33617	1.34	1.9E-02	U19241.1	NT	Homo sapiens interferon-gamma receptor alpha chain gene, exon 1
7308	20279	33618	1.34	1.9E-02	U19241.1	NT	Homo sapiens interferon-gamma receptor alpha chain gene, exon 1
8917	21883		1.2	1.9E-02	AL182754.2	NT	Neisseria meningitidis serogroup A strain Z2491 complete genome; segment 3/7
9886	22639	36096	0.78	1.9E-02	BF136129.1	EST_HUMAN	601886130F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125482 5'
10071	22698	36457	0.43	1.9E-02	L10114.1	NT	Nicotiana tabacum type II phytochrome (phyB) gene, complete cds
10405	23327	36811	1.09	1.9E-02	BF695832.1	EST_HUMAN	60185235F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4078253 5'
10510	23432	36929	0.45	1.9E-02	N39180.1	EST_HUMAN	y46d04.x1 Soares multiple_sclerosis_2NblMSP Homo sapiens cDNA clone IMAGE:278639 3'
10614	23538	37034	0.5	1.9E-02	D64001.1	NT	Synechocystis sp. PCC6803 complete genome, 20/27, 2538000-2844794
12372	25742	31620	3.14	1.9E-02	AF101065.1	NT	Hirudo medicinalis intermediate filament gillardin mRNA, complete cds
13026	25574	31696	1.4	1.9E-02	X68271.1	NT	H. sapiens MUC18 gene exon 16
346	13435	28357	1.35	1.8E-02	AW771104.1	EST_HUMAN	hmf52c06.x1 NC1_CQAP_Cot17 Homo sapiens cDNA clone IMAGE:3027274 3' similar to contains element MER29 repetitive element;
688	13749	28875	1.39	1.8E-02	BF308122.1	EST_HUMAN	601894329F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4139983 5'
1184	14205	27159	1.87	1.8E-02	X17694.1	NT	H. fransced mRNA for myelin basic protein (MBP)
2887	15683	28701	1.78	1.8E-02	AE004544.1	NT	Pseudomonas aeruginosa PA01, section 105 of 529 of the complete genome
3224	18279		1.06	1.8E-02	AB058828.1	EST_HUMAN	h52a09.x1 Soares NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2080286 3'
3902	18942	28853	1.01	1.8E-02	AW879122.1	EST_HUMAN	MR1-OT0011-280300-009-g04 OT0011 Homo sapiens cDNA
3902	18942	28854	1.01	1.8E-02	AW879122.1	EST_HUMAN	MR1-OT0011-280300-009-g04 OT0011 Homo sapiens cDNA
4113	17147		1.04	1.8E-02	AA881448.1	EST_HUMAN	sk24f04.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1406935 3'
4461	17487	30374	1.49	1.8E-02	AW636363.1	EST_HUMAN	QV4-DT0021-301298-071-b11 DT0021 Homo sapiens cDNA
4992	18007	30895	0.88	1.8E-02	O60810	SWISSPROT	HYPOTHETICAL PROTEIN DJB45024.2
5287	18293	31154	0.68	1.8E-02	AF255711.1	NT	Oryza sativa putative histone deacetylase HD2 mRNA, complete cds
6524	19587	32845	0.59	1.8E-02	AE002518.1	NT	Neisseria meningitidis serogroup B strain MC58 section 160 of 208 of the complete genome
6524	19587	32846	0.59	1.8E-02	AE002518.1	NT	Neisseria meningitidis serogroup B strain MC58 section 160 of 208 of the complete genome
6882	20205	33534	4.59	1.8E-02	P14310	SWISSPROT	HYPOTHETICAL 7.9 KD PROTEIN IN FXW 5REGION
7699	20657	34021	0.65	1.8E-02	BF125680.1	EST_HUMAN	601763268F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026280 5'
7722	20657	34021	0.58	1.8E-02	BF125680.1	EST_HUMAN	601763268F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026280 5'
8467	21436	34854	0.77	1.8E-02	U37091.1	NT	Mus musculus carbonic anhydrase IV gene, complete cds

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8811	21778	35203	0.78	1.8E-02	AW905327.1	EST_HUMAN	QV2-NN1073-220400-159-H09-NN1073 Homo sapiens cDNA
8857	21824	35247	0.75	1.8E-02	6978943	NT	Mus musculus microtubule-associated protein 2 (Mtap2), mRNA
9849	22785	36238	0.5	1.8E-02	BF241824.1	EST_HUMAN	601877028F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105303 5'
9849	22785	36239	0.5	1.8E-02	BF241824.1	EST_HUMAN	601877028F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105303 5'
10000	22927		2.03	1.8E-02	AA987543.1	EST_HUMAN	af82f03.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1394821 3' similar to gb:111672 ZINC FINGER PROTEIN 91 (HUMAN);
10423	23345	36830	1.65	1.8E-02	BE778274.1	EST_HUMAN	601483545F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868663 5'
10586	23508	37000	1.2	1.8E-02	X86833.1	NT	L. stagnalis mRNA for myomodulin neuropeptide precursor
11765	23920	37438	1.7	1.8E-02	AB002337.2	NT	Homo sapiens mRNA for KIAA0339 protein, partial cds
11765	23920	37439	1.7	1.8E-02	AB002337.2	NT	Homo sapiens mRNA for KIAA0339 protein, partial cds
11835	24816	38413	2.73	1.8E-02	AP000008.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 1165001-1485000 nt. position (877)
11948	24827	38422	3.16	1.8E-02	U62749.1	NT	Zea mays acidic ribosomal protein P2a-3 (pp2a-3) mRNA, partial cds
13105	25826	31880	1.35	1.8E-02	R40255.1	EST_HUMAN	y80001.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:28986 3' similar to gb:M62783
13105	25826	31881	1.35	1.8E-02	R40255.1	EST_HUMAN	ALPHA-N-ACETYL GALACTOSAMINIDASE PRECURSOR (HUMAN);
907	13962	26918	0.8	1.7E-02	BE394868.1	EST_HUMAN	y80001.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:28985 3' similar to gb:M62783
1806	14834	27823	2.15	1.7E-02	AW573183.1	EST_HUMAN	601310628F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632180 5'
1806	14834	27824	2.15	1.7E-02	AW573183.1	EST_HUMAN	h334a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833740 3' similar to contains L1.11 L1 repetitive element;
1887	14912		4.23	1.7E-02	AL163204.2	NT	h334a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833740 3' similar to contains L1.11 L1 repetitive element;
2121	15138		11.19	1.7E-02	AB004818.1	NT	Homo sapiens chromosome 21 segment HS21C004
2301	15313	28333	1.03	1.7E-02	S74186.1	NT	Oryctolagus cuniculus mRNA for mitsugumin28, complete cds
2848	16845		1.18	1.7E-02	7657495	NT	[Microsatellite INRA41] [Ovis aries=sheep, Genomic, 361 nt, segment 1 of 2]
3011	16069	28990	0.96	1.7E-02	A1147615.1	EST_HUMAN	Homo sapiens putative Rab5 GDI/GTP exchange factor homologue (RABEX5), mRNA
3523	16569		5.52	1.7E-02	AW827368.1	EST_HUMAN	qb22a08.x1 Soares_pregnant uterus_NH-IPU Homo sapiens cDNA clone IMAGE:1696882 3'
4188	17229		0.96	1.7E-02	AA689818.1	EST_HUMAN	hm45a04.x1 NCI_OGAP_RDF1 Homo sapiens cDNA clone IMAGE:3015534 3' similar to contains MER19.b1 MER19 repetitive element;
4228	17257		2.04	1.7E-02	R07508.1	EST_HUMAN	ae18f04.s1 Stragene ovary (8937217) Homo sapiens cDNA clone IMAGE:856927 3' similar to contains Alu repetitive element/contains element MER24 repetitive element;
4482	17507	30398	0.7	1.7E-02	A1305279.1	EST_HUMAN	y66f08.l1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:124647 5'
							qm08g07.x1 NCI_OGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881276 3' similar to gb:X52359 ZINC FINGER PROTEIN 30 (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4557	17580	30471	1.52	1.7E-02	AW573183.1	EST_HUMAN	h34a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833740 3' similar to contains
4744	17764	30658	1.54	1.7E-02	V00841.1	NT	L1.1 L1 repetitive element;
4851	17868		7.05	1.7E-02	AI015078.1	EST_HUMAN	Messenger RNA for anglerfish (<i>Lophius americanus</i>) somatostatin II
5106	18116	30989	0.74	1.7E-02	6881289	NT	ov61e02.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1840858 3'
5229	18237		0.91	1.7E-02	AJ228041.1	NT	Rattus norvegicus N-arginine diase convertase 1 (Nrd1), mRNA
6248	18321	32581	1.63	1.7E-02	AI769247.1	EST_HUMAN	Homo sapiens 859 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
6518	18676		0.84	1.7E-02	Z38383.1	NT	wg35f08.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2367113 3' similar to contains Alu repetitive element
6731	19787	33065	1.37	1.7E-02	AK038280.1	EST_HUMAN	Tritreum (ATCC34921) sinA gene for cyclosporine synthetase
7251	19988	33284	1.31	1.7E-02	AF190630.1	NT	cy55h03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1872881 3'
7411	20376	33728	1.96	1.7E-02	8400716	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
7681	20543	33902	0.85	1.7E-02	L07889.1	NT	Homo sapiens nebulin (NEB), mRNA
7581	20543	33903	0.85	1.7E-02	L07889.1	NT	Human apolipoprotein (a) gene, exon 1
8016	20854		1.98	1.7E-02	AJ010770.1	NT	Human apolipoprotein (a) gene, exon 1
9791	21114	34514	0.91	1.7E-02	U21854.1	NT	Homo sapiens hyaluron gene, exons 1-50
10057	22884	36453	1.31	1.7E-02	AL040554.1	EST_HUMAN	Caenorhabditis elegans cCAF-1 protein gene, complete cds
12084	24956	38551	1.59	1.7E-02	5802007	NT	DKFZp434f0314_r1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434f0314 5'
12910	25910	31424	3.15	1.7E-02	AW603482.1	EST_HUMAN	Homo sapiens serum constituent protein (MSE55), mRNA
13059	25585	31687	1.31	1.7E-02	AA846826.1	EST_HUMAN	OMA-NN1030-040400-130-408 NN1030 Homo sapiens cDNA
512	13583		2.22	1.8E-02	AL021829.1	NT	ce08404.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:1385287 similar to contains element MSR1 repetitive element;
1665	14897	27673	0.91	1.8E-02	Y18888.1	NT	Mycobacterium tuberculosis H37Rv complete genome; segment 13/162
2572	15673	28593	0.96	1.8E-02	AJ006345.1	NT	Treponema maltophilum flaB2, flaB3 and flid genes for flagellin subunit proteins and CAP protein homologue
2661	15648	28671	1.45	1.8E-02	AA484872.1	EST_HUMAN	Homo sapiens KVLQT1 gene
2704	15700		1.37	1.8E-02	AB014534.1	NT	ne81408.s1 NCI_CGAP_Ewt1 Homo sapiens cDNA clone IMAGE:910687
3537	16583	29508	4.48	1.8E-02	AW850682.1	EST_HUMAN	Homo sapiens mRNA for KIAA0834 protein, partial cds
4204	17235		2.14	1.8E-02	AF110520.1	NT	ILS-CT0219-160200-063-C07 CT0219 Homo sapiens cDNA
4329	17357	30245	0.98	1.8E-02	AW875407.1	EST_HUMAN	Mus musculus major histocompatibility complex region NG27, NG28, RPS28, NADH oxidoreductase, NG28, KIFC1, Fas-binding protein, BING1, tapasin, RafGDS-like, KE2, BING4, beta 1,3-galactosyl transferase, and
5172	18181		0.76	1.8E-02	N80156.1	EST_HUMAN	RPS18 genes, complete cds; Sacm21 gene, partial
5325	18431	31183	0.49	1.8E-02	AI281385.1	EST_HUMAN	QV2-PT0012-140100-030-407 PT0012 Homo sapiens cDNA
							z865607.s1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:287444 3'
							qu42609.x1 NCI_CGAP_Lym5 Homo sapiens cDNA clone IMAGE:1987417 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6705	18800	31977	1.33	1.6E-02	6871715	NT	Mus musculus CD5 antigen (Cd5), mRNA
6769	18853	33198	2.07	1.6E-02	AB015281.1	NT	Candida albicans CaGCR3 gene, complete cds
7117	20051	33354	0.93	1.6E-02	AB027571.1	NT	Saccharomyces cerevisiae CAD2 gene for cadmium resistance protein, complete cds
7117	20051	33355	0.93	1.6E-02	AB027571.1	NT	Saccharomyces cerevisiae CAD2 gene for cadmium resistance protein, complete cds
7978	20917	34908	1.08	1.6E-02	AL161508.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
8458	21427	34844	0.72	1.6E-02	AJ277682.1	NT	Homo sapiens partial TUB gene for tubby (mouse) homolog and LMO1 gene for LIM domain only 1 protein
8518	21487		1.5	1.6E-02	X05151.1	NT	Human apoC-II gene for preproapolipoprotein C-II
10400	23322		1.88	1.6E-02	AF078764.1	NT	Drosophila melanogaster enhancer of polycomb (E(Pc)) mRNA, complete cds
10785	23706	37208	1.2	1.6E-02	AA572818.1	EST_HUMAN	nr1903.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914280 similar to SW:TELO_RABIT
10785	23706	37207	1.2	1.6E-02	AA572818.1	EST_HUMAN	nr1903.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914280 similar to SW:TELO_RABIT
11255	25705	37730	1.83	1.6E-02	Z94828.1	NT	G.gallus microsatellite DNA (LEI0260 (-T168E11))
11547	24488	38042	1.7	1.6E-02	AL161508.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
11547	24488	38043	1.7	1.6E-02	AL161508.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
11839	24722	38307	1.66	1.6E-02	AB373558.1	EST_HUMAN	qp86e10.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:2042442 3'
12347	18334	31172	1.39	1.6E-02	Q64176	SWISSPROT	LIVER CARBOXYLESTERASE 22 PRECURSOR (EGASYN) (ESTERASE-22)
12347	18334	31173	1.39	1.6E-02	Q64176	SWISSPROT	LIVER CARBOXYLESTERASE 22 PRECURSOR (EGASYN) (ESTERASE-22)
752	13813		20.75	1.5E-02	8823734	NT	Homo sapiens transcription factor (HSA130894), mRNA
2152	15168	28184	4.44	1.5E-02	N39521.1	EST_HUMAN	W27007.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243925 3'
2185	15200	28220	1.82	1.5E-02	AL161504.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 90
3074	16131	28043	2.54	1.5E-02	AJ008218.1	NT	Homo sapiens CACNA1F gene, exons 1 to 48
3074	16131	28044	2.54	1.5E-02	AJ008218.1	NT	Homo sapiens CACNA1F gene, exons 1 to 48
3737	16778	28682	1.06	1.5E-02	BF092942.1	EST_HUMAN	MR4-TN0115-080900-201-b12 TN0115 Homo sapiens cDNA
6426	19483	32745	1.33	1.5E-02	Q09711	SWISSPROT	HYPOTHETICAL CALCIUM-BINDING PROTEIN C18B11.04 IN CHROMOSOME 1
7541	20504		1.59	1.5E-02	11467282	NT	Cyanophora paradoxa cyanella, complete genome
7631	20591	33554	1.38	1.5E-02	11418713	NT	Homo sapiens KIAA1009 protein (KIAA1009), mRNA
8208	21178	34585	1.5	1.5E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
8213	21182	34593	4.62	1.5E-02	11417738	NT	Homo sapiens vef1-RNA synthetase 2 (VARS2), mRNA
9182	22148	35575	0.93	1.5E-02	BF345554.1	EST_HUMAN	602019135F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4154504 5'
9823	22872		0.58	1.5E-02	AF096774.1	NT	Homo sapiens kinase-related protein isoform 1 mRNA, complete cds
9829	22812	36266	1.58	1.5E-02	D44606.1	NT	Saccharomyces cerevisiae chromosome VI plasmid GapC
10170	23095	36574	0.95	1.5E-02	R32867.1	EST_HUMAN	yh54b10.l1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:133531 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10170	23095	36575	0.95	1.5E-02	R32667.1	EST_HUMAN	yf54b10.t1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:133531 5'
11503	24445	37997	2.75	1.5E-02	L40609.1	NT	Plasmodium falciparum (strain FCR3) variant-specific surface protein (var-2, var-3) genes, complete cds's
11537	24478	38028	2.52	1.5E-02	AL111238.1	NT	Botrytis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
12564	25763		2.04	1.5E-02	AW750834.1	EST_HUMAN	RC4-CN0048-140100-011-c11 CN0049 Homo sapiens cDNA
13078	25810		1.3	1.5E-02	AF763127.1	EST_HUMAN	w08103.x1 NCI_CGAP_GLI1 Homo sapiens cDNA clone IMAGE:2389483 3' similar to contains Alu repetitive element; contains element MER28 MSR1 repetitive element;
417	13490		1.99	1.4E-02	AE002230.2	NT	Chlamydia pneumoniae AR39, section 58 of 94 of the complete genome
1120	14184	27115	5.44	1.4E-02	7705980	NT	Homo sapiens NESH protein (LOC51225), mRNA
1261	14296		1.74	1.4E-02	U32800.1	NT	Haemophilus influenzae Rd section 115 of 163 of the complete genome
1301	14337		3.4	1.4E-02	U67778.1	NT	Xenopus laevis neurogenin related 1b (X-NGNR-1b) mRNA, complete cds
1520	14552		1.03	1.4E-02	AV723785.1	EST_HUMAN	AV723785 HTB Homo sapiens cDNA clone HTBAH111 5'
3226	16281	28204	2.04	1.4E-02	AF160969.2	NT	Bifidobacterium longum NeryH+ antiporter (nhaB), cytosine deaminase, and alpha-galactosidase (egil) genes, complete cds; and N-acetylglucosaminyl-xylose repressor protein (nagC/xyR) gene, partial cds
3409	16458	28380	0.98	1.4E-02	AW074212.1	EST_HUMAN	xb09039.x1 NCI_CGAP_GLI1 Homo sapiens cDNA clone IMAGE:2575793 3'
3498	16543	28487	8.29	1.4E-02	AL161588.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 82
3498	16543	28488	8.29	1.4E-02	AL161588.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 82
3669	16712	29527	8.89	1.4E-02	6996918	NT	Mus musculus histocompatibility 2, complement component factor B (H2-Bf), mRNA
4516	17541	30427	6.1	1.4E-02	AW962688.1	EST_HUMAN	EST374761 IMAGE resequences, MAGG Homo sapiens cDNA
4516	17541	30428	6.1	1.4E-02	AW962688.1	EST_HUMAN	EST374761 IMAGE resequences, MAGG Homo sapiens cDNA
4911	17828	30818	8.08	1.4E-02	BE733142.1	EST_HUMAN	601567403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842280 5'
4911	17828	30819	8.08	1.4E-02	BE733142.1	EST_HUMAN	601567403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842280 5'
5130	18139	31017	1.01	1.4E-02	AW948453.1	EST_HUMAN	CM0-FN0041-120500-370-h08 FN0041 Homo sapiens cDNA
5988	25992		0.95	1.4E-02	X91338.1	NT	H. sapiens LatSS-B pseudogene 3
6555	19815	32880	4.9	1.4E-02	AA559030.1	EST_HUMAN	nt11c04.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1028980 3' similar to contains Alu repetitive element;
6555	19815	32881	4.9	1.4E-02	AA559030.1	EST_HUMAN	nt11c04.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1028980 3' similar to contains Alu repetitive element;
8478	21447		1.61	1.4E-02	AL022073.1	NT	Mycobacterium tuberculosis H37Rv complete genome; segment 88/162
9249	22215	35645	0.77	1.4E-02	M81702.1	NT	Candida boidinii methanol oxidase (AOD1) gene, complete cds
9510	22473	35917	0.9	1.4E-02	AJ27266.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
9755	22896	36153	2.15	1.4E-02	BE544561.1	EST_HUMAN	601078239F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3484241 5'
10923	23843		0.58	1.4E-02	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12254	25080	38172	2.14	1.4E-02	X60458.1	NT	Human IFNAR gene for Interferon alpha/beta receptor
12616	25312		1.47	1.4E-02	AF324885.1	NT	Arabidopsis thaliana F21J9.2 mRNA, complete cds
12882	26474		1.98	1.4E-02	11428988	NT	Homo sapiens sperm associated antigen 7 (SPAG7), mRNA
1972	14983	27894	2.05	1.3E-02	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3227	18282	28205	2.31	1.3E-02	BF697081.1	EST_HUMAN	602129475F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4286203 5'
3227	18282	28206	2.31	1.3E-02	BF697081.1	EST_HUMAN	602129475F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4286203 5'
3883	17033		1.38	1.3E-02	AF168288.1	NT	Mus musculus beta-sarcoglycan gene, complete cds
4864	17679	30869	1.08	1.3E-02	U66061.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV16S1P, TCRBV15S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBJ1S1, TCRBJ1S2,>
5317	18423	31225	1.79	1.3E-02	AL049886.2	NT	Mus musculus chromosome X contigB; X-linked lymphocyte regulated 5 gene, Zinc finger protein 275, Zinc finger protein 92, mmxq28orf
5317	18423	31228	1.79	1.3E-02	AL049886.2	NT	Mus musculus chromosome X contigB; X-linked lymphocyte regulated 5 gene, Zinc finger protein 275, Zinc finger protein 92, mmxq28orf
6288	18380	32597	1.21	1.3E-02	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p-44) gene, partial cds, neuronal apoptosis inhibitory protein (neip) and survival motor neuron protein (smn) genes, complete cds
6322	18383	32634	0.7	1.3E-02	M82862.1	NT	C.reinhardtii ribulose 1,5-bisphosphate carboxylase/oxygenase activase mRNA, complete cds
7164	18388	31228	1.25	1.3E-02	AL161546.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 48
7164	18388	31229	1.25	1.3E-02	AL161546.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 48
7829	20777	34155	4.86	1.3E-02	AI031593.1	EST_HUMAN	ow08g05.x1 Soares_parathyroid_tumor_Nb-HPA Homo sapiens cDNA clone IMAGE:1846072 3' similar to contains Alu repetitive element
8829	21783	35216	1.48	1.3E-02	AF156861.1	NT	Homo sapiens human endogenous retrovirus W gagC3.37 G gag (gag) gene, complete cds
10557	23489	36981	2.18	1.3E-02	M63707.1	NT	Mouse kidney androgen-regulated protein (KAP) gene, complete cds
10641	23563	37059	0.63	1.3E-02	AE001304.1	NT	Chlamydia trachomatis section 31 of 87 of the complete genome
10986	23908	37421	0.44	1.3E-02	AA707741.1	EST_HUMAN	zh24a07.s1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:412880 3'
11336	24288	37809	3.74	1.3E-02	AW288593.1	EST_HUMAN	xx34e03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2815038 3'
11336	24288	37810	3.74	1.3E-02	AW288593.1	EST_HUMAN	xx34e03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2815038 3'
12622	25823		1.4	1.3E-02	Z89117.1	NT	Bacillus subtilis complete genome (section 14 of 21); from Z599451 to Z812870
12714	25368		2.51	1.3E-02	9633089	NT	Human herpesvirus 6B, complete genome
12886	25718		16.88	1.3E-02	AF152238.1	NT	Homo sapiens V1b vasopressin receptor (VPR3) gene, complete cds
214	13314		0.67	1.2E-02	X87344.1	NT	H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RINC8, 9, 13 and 14 genes

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
355	13443	28368	4.87	1.2E-02	AA052289.1	EST_HUMAN	z65g01.1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:381840 5' similar to contains element L1 repetitive element:
453	13528	26456	1.81	1.2E-02	P38888	SWISSPROT	HYPOTHETICAL 17.1 KD PROTEIN IN PUR5 3'REGION
740	13801	26740	3.32	1.2E-02	A1183522.1	EST_HUMAN	qd68e12.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1734870 3' similar to contains L1.L1 L1 repetitive element:
2187	15202	28222	1.82	1.2E-02	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
2180	15205	28225	1.44	1.2E-02	AV731704.1	EST_HUMAN	AV731704 HTF Homo sapiens cDNA clone HTFBHG11 5'
2449	15454	28476	1.65	1.2E-02	AW172350.1	EST_HUMAN	X87e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659432 3'
2505	15508	28534	0.89	1.2E-02	BE538310.1	EST_HUMAN	601088406F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3484608 5'
2505	15508	28535	0.89	1.2E-02	BE538310.1	EST_HUMAN	601088406F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3454608 5'
2843	15454	28476	1.31	1.2E-02	AW172350.1	EST_HUMAN	X87e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659432 3'
3118	16175		6.56	1.2E-02	AA075418.1	EST_HUMAN	zm88e03.1 Stragene ovarian cancer (#837219) Homo sapiens cDNA clone IMAGE:645020 5'
3301	16354	29273	2.82	1.2E-02	R62805.1	EST_HUMAN	W11b08.s1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:138903 3'
4817	17834	30826	8.36	1.2E-02	6754367	NT	Mus musculus interferon regulatory factor 5 (irf5), mRNA
4853	17888	30858	1.66	1.2E-02	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
5080	18090		1.54	1.2E-02	AB019786.1	NT	Gynops pyrogastrer OpUbiqT mRNA, partial cds
5121	18131	31008	2.09	1.2E-02	AV731704.1	EST_HUMAN	AV731704 HTF Homo sapiens cDNA clone HTFBHG11 5'
5259	18287	31135	1.01	1.2E-02	AF185578.1	NT	Mus musculus POZ/zinc finger transcription factor ODA-8 mRNA, complete cds
5769	18861		0.5	1.2E-02	AA759018.1	EST_HUMAN	al28if10.s1 Soares testis_NHT Homo sapiens cDNA clone 1344235 3'
5946	18836	32120	1.72	1.2E-02	D78589.1	NT	Rana rugosa mRNA for catheculin, complete cds
6238	19311	32543	0.58	1.2E-02	AF045555.1	NT	Homo sapiens wbccl1 (WBSCR1) and wbccl5 (WBSCR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7203	20227	33560	5.57	1.2E-02	AF175412.1	NT	Mus musculus DNA methyltransferase (Dnmt1) gene, exons 2, 3, 4, and 5
7510	20475	33836	1.07	1.2E-02	H02197.1	EST_HUMAN	y34h12.s1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:150695 3'
7534	20497	33838	8.9	1.2E-02	AV732093.1	EST_HUMAN	AV732093 HTF Homo sapiens cDNA clone HTFBUC99 5'
7805	20755	34131	0.54	1.2E-02	BF216660.1	EST_HUMAN	601832949F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4085253 5'
8330	21299	34715	2.29	1.2E-02	Q11205	SWISSPROT	OMP-N-ACETYLNEURAMINATE-BETA-GALACTOSAMIDE-ALPHA-2,3-SIALYLTRANSFERASE (BETA-GALACTOSIDE ALPHA-2,3-SIALYLTRANSFERASE) (ALPHA 2,3-ST) (GAL-NAC6S) (GAL-BETA-1,3-GALNA-C-ALPHA-2,3-SIALYLTRANSFERASE) (STSGALA-2) (SIAT4-B)
8534	21502	34919	1.31	1.2E-02	AF193612.1	NT	Homo sapiens fringe protein mRNA, partial cds
8534	21502	34920	1.31	1.2E-02	AF193612.1	NT	Homo sapiens fringe protein mRNA, partial cds
9242	22208		1.1	1.2E-02	178887.1	EST_HUMAN	y472a08.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:113774 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9997	22924	36389	2.63	1.2E-02	AB031013.1	NT	Norwalk-like virus genogroup 2 gene for capsid protein, complete cds
10030	22967	36426	1.29	1.2E-02	AJ246003.1	NT	Homo sapiens Spast gene for spastin protein
12310	25118	31841	2.74	1.2E-02	O15534	SWISSPROT	PERIOD CIRCADIAN PROTEIN 1 (CIRCADIAN PACEMAKER PROTEIN RIGU1) (HPER)
12898	25482		5.91	1.2E-02	C19119.1	EST_HUMAN	C19119 Human placenta cDNA (TF-1/14wra) Homo sapiens cDNA clone GEN-557G08 5'
1274	14309	27270	1.14	1.1E-02	AA070364.1	EST_HUMAN	zmf06a11.s1 Stragogene neuroepithelium (#637231) Homo sapiens cDNA clone IMAGE:530824 3'
1719	14749	27734	1.8	1.1E-02	X75491.1	NT	H. sapiens LPA gene, exon 4
1719	14749	27735	1.8	1.1E-02	X75491.1	NT	H. sapiens LPA gene, exon 4
2054	15073	28082	4.08	1.1E-02	BF345263.1	EST_HUMAN	602018037F1 NCI CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4153808 5'
2889	15948		3.91	1.1E-02	N99523.1	EST_HUMAN	z440c05.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:295040 5'
3535	16981	29305	2.75	1.1E-02	AI653508.1	EST_HUMAN	tp95b10.x1 NCI CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2216639 3' similar to SW:XP_F_HUMAN
4051	17098		1.62	1.1E-02	BE144637.1	EST_HUMAN	Q82889 DNA-REPAIR PROTEIN COMPLEMENTING XP-F CELL ;
4133	17165		0.71	1.1E-02	AW813768.1	EST_HUMAN	PM3-HT0175-300999-001-h08 HT0175 Homo sapiens cDNA
4887	17884	30772	2.22	1.1E-02	AL048383.2	EST_HUMAN	RC3-ST0197-120200-015-g11 ST0197 Homo sapiens cDNA
							DKFZp588E0824_s1 588 (synonym: huter1) Homo sapiens cDNA clone DKFZp588E0824
6272	19345	32578	1.02	1.1E-02	U68480.1	NT	Bacillus subtilis SpoVK (spoVK), YnbA (ynbA), YnbB (ynbB), GlnR (glnR), glutamine synthetase (glnA), YnaH (ynaH), YnaB (ynbB), YnaC (ynbC), YnaD (ynbD), YnaE (ynbE), YnaF (ynbF), YnaG (ynbG), YnaH (ynbH), YnaI (ynbI), YnaJ (ynbJ), YnaK (ynbK), YnaL (ynbL), YnaM (ynbM), YnaN (ynbN), YnaO (ynbO), YnaP (ynbP), YnaQ (ynbQ), YnaR (ynbR), YnaS (ynbS), YnaT (ynbT), YnaU (ynbU), YnaV (ynbV), YnaW (ynbW), YnaX (ynbX), YnaY (ynbY), YnaZ (ynbZ)
7855	20800	34178	2.47	1.1E-02	BE149611.1	EST_HUMAN	RC1-HT0256-100300-018-h07 HT0256 Homo sapiens cDNA
8105	21042	34441	3.79	1.1E-02	Q631294	NT	Melanoplus sanguinipes entomopoxvirus, complete genome
8987	21853	35377	0.7	1.1E-02	AW996160.1	EST_HUMAN	QV3-BN0045-220300-128-h02 BN0045 Homo sapiens cDNA
9174	22140	35568	0.68	1.1E-02	C04803.1	EST_HUMAN	Q04803 Human heart cDNA (Ynakamura) Homo sapiens cDNA clone 3NHC4040
9253	22219	35650	7.21	1.1E-02	Q61882	SWISSPROT	NEUROGENIC LOCUS NOTCH 3 PROTEIN
10289	23214	36898	2.1	1.1E-02	AA082578.1	EST_HUMAN	z424a01.t1 Stragogene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone IMAGE:548328 5'
10454	23378	36899	3.79	1.1E-02	AA314865.1	EST_HUMAN	EST188494 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' and
11324	24274	37802	2.01	1.1E-02	11435505	NT	Homo sapiens T-box 5 (TBX5), mRNA
12194	25039		3.52	1.1E-02	AA688239.1	EST_HUMAN	ab577f11.s1 Stragogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:833005 3' similar to contains
12960	17165		1.67	1.1E-02	AW813768.1	EST_HUMAN	Alu repetitive element
7	13127	26027	6.08	1.0E-02	AW849120.1	EST_HUMAN	RC3-ST0197-120200-015-g11 ST0197 Homo sapiens cDNA
1526	14559	27530	1.07	1.0E-02	AW368128.1	EST_HUMAN	MIR3-CT0176-111099-003-e10 CT0176 Homo sapiens cDNA
2578	15579		1.28	1.0E-02	AA806389.1	EST_HUMAN	CM2-HT0177-041099-017-h12 HT0177 Homo sapiens cDNA
3108	16163	29075	2.7	1.0E-02	BE835556.1	EST_HUMAN	cc22h08.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1350466 3'
3276	16330	29251	1.33	1.0E-02	BE988999.1	EST_HUMAN	RC0-FN0025-260500-021-d02 FN0025 Homo sapiens cDNA
							801648867R1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3833888 3'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3520	16568		0.65	1.0E-02	AW845621.1	EST_HUMAN	MRO-CT0060-081089-003-h10 CT0060 Homo sapiens cDNA
3896	16935	23845	0.75	1.0E-02	AI065038.1	EST_HUMAN	HA0821 Human fetal liver cDNA library Homo sapiens cDNA
3911	16951	29862	1.09	1.0E-02	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
4811	17828	30726	4.97	1.0E-02	6753521	NT	Mus musculus corticotropin releasing hormone receptor 2 (Crhr2), mRNA
4881	17898	30787	5.01	1.0E-02	R08567.1	EST_HUMAN	y454h01.1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:189633 5'
5036	18048	30929	0.63	1.0E-02	AL161593.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 89
5490	18590	31501	0.86	1.0E-02	H62681.1	EST_HUMAN	y436h11.1 Soares ovary tumor N6HOT Homo sapiens cDNA clone IMAGE:235941 5'
5940	18830	32114	0.82	1.0E-02	AF309388.1	NT	Mus musculus transcription complex subunit NF-ATc4 (Nfatc4) gene, exons 1 and 2
6237	19310	32542	1.02	1.0E-02	AF257303.1	NT	Mus musculus synaptobrevin II (Syb2) gene, complete cds
6305	19376	32614	2.49	1.0E-02	AW577113.1	EST_HUMAN	MR4-BT0359-070100-201-H01 BT0359 Homo sapiens cDNA
6305	19376	32615	2.49	1.0E-02	AW577113.1	EST_HUMAN	MR4-BT0359-070100-201-H01 BT0359 Homo sapiens cDNA
6926	20150	33470	2.15	1.0E-02	Z29842.1	NT	Z.mays U3snRNA pseudogene
9748	22889	36145	4.19	1.0E-02	BF036331.1	EST_HUMAN	601459570F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863177 5'
9748	22889	36146	4.19	1.0E-02	BF036331.1	EST_HUMAN	601459570F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863177 5'
11594	24532		1.96	1.0E-02	AF157559.1	NT	Citridia faeculata 27 kDa guide RNA-binding protein mRNA, complete cds; mitochondrial gene for mitochondrial product
11695	24680	36238	2.05	1.0E-02	AV760016.1	EST_HUMAN	AV760016 MDS Homo sapiens cDNA clone MDSBDC10 5'
12091	24962		1.47	1.0E-02	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
12276	25990		1.99	1.0E-02	Q62203	SWISSPROT	SPLICEOSOME ASSOCIATED PROTEIN 62 (SAP 62) (SPLICING FACTOR 3A SUBUNIT 2) (SF3A66)
12337	25757	31518	3.9	1.0E-02	AW935521.1	EST_HUMAN	RC2-DT0007-120200-016-H02 DT0007 Homo sapiens cDNA
12356	25916		5.66	1.0E-02	S70330.1	NT	Homo sapiens renal dipeptidase (RDP) gene, complete cds
12722	25789		2.07	1.0E-02	AJ276505.1	NT	Mus musculus genomic fragment, 279 Kb, chromosome 7
12873	25873		4.76	1.0E-02	X63654.1	NT	H. sepiens gene for Me491/CD63 antigen
13094	25620	31676	1.7	1.0E-02	AB039887.1	NT	Homo sapiens WDR4 gene for WD repeat protein, complete cds
894	13949	26907	1.77	9.0E-03	AJ796126.1	EST_HUMAN	WH4208.x1 NCJ_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2389433 3' similar to contains element
1269	14304		1.88	9.0E-03	BE781889.1	EST_HUMAN	MER22 MER22 repetitive element
1476	14510	27485	0.97	9.0E-03	AE001270.1	NT	601470242F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873346 5'
2405	15412	29436	2.87	9.0E-03	AL161559.2	NT	Treponea pallidum section 88 of 87 of the complete genome
2413	15420	28444	0.95	9.0E-03	AF099934.1	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 59
2917	15975	28998	0.69	9.0E-03	AJ251744.1	EST_HUMAN	Mus musculus MHC class III protein RP1 (Rpl) mRNA, partial cds
2917	15975	28999	0.69	9.0E-03	AJ251744.1	EST_HUMAN	qh60f09.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854281 3'
3682	16725	29638	0.87	9.0E-03	J05184.1	NT	qh60f09.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854281 3'
5061	18071	30950	1.01	9.0E-03	T70044.1	EST_HUMAN	S. acidocaldarius thermophilin gene, complete cds
							yc77b08.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:80919 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5061	18071	30951	1.01	8.0E-03	T70044.1	EST_HUMAN	yc17b08.e1 Striatogene lung (#837210) Homo sapiens cDNA clone IMAGE:80819 3'
5260	18298	31136	0.95	9.0E-03	6753521	NT	Mus musculus corticotropin releasing hormone receptor 2 (Crhr2), mRNA
5908	18994		1.2	9.0E-03	A1809792.1	EST_HUMAN	wf7704.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2361631 3'
6785	19840		4	9.0E-03	BE745988.1	EST_HUMAN	601673438F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834762 5'
7698	20656	34020	0.63	8.0E-03	A1242219.1	EST_HUMAN	qh87c12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1853974 3'
7712	20669	34036	0.81	9.0E-03	8822570	NT	Homo sapiens hypothetical protein FLJ10650 (FLJ10650), mRNA
8207	21177		0.99	9.0E-03	AL039999.1	EST_HUMAN	DKFZp434L0412_j1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0412 5'
8992	21990		0.55	9.0E-03	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10221	23146	36635	1.42	9.0E-03	P20908	SWISSPROT	COLLAGEN ALPHA 1(V) CHAIN PRECURSOR
11331	24261		1.6	9.0E-03	Y18000.1	NT	Homo sapiens NF2 gene
12690	25685		2.12	9.0E-03	BE348385.1	EST_HUMAN	hw17b09.x1 NCL_OGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183161 3'
12989	25549		15.47	9.0E-03	BF351141.1	EST_HUMAN	PM1-HT0452-291298-001-e03 HT0452 Homo sapiens cDNA
502	13574		3.01	8.0E-03	AA723007.1	EST_HUMAN	zh30e03.s1 Soares_pineal_gland_N3H-IPG Homo sapiens cDNA clone IMAGE:413586 3' similar to contains
991	14043	26997	19.52	8.0E-03	AF106658.1	NT	Alu repetitive element
2168	15182	28202	1.66	8.0E-03	AL163283.2	NT	Homo sapiens adenylosuccinate lyase gene, complete cds
3321	16372	29283	1.12	8.0E-03	BE171225.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C083
3370	16420	29345	0.93	8.0E-03	AJ131016.1	NT	RC1-HT0545-120200-011-509 HT0545 Homo sapiens cDNA
3689	16732	29644	1.25	8.0E-03	P32644	SWISSPROT	Homo sapiens SCL gene locus
3689	16732	29645	1.25	8.0E-03	P32644	SWISSPROT	HYPOTHETICAL 127.0 KD PROTEIN IN RAD24-BMH1 INTERGENIC REGION
4285	17314	30193	1.08	8.0E-03	BE840049.1	EST_HUMAN	HYPOTHETICAL 127.0 KD PROTEIN IN RAD24-BMH1 INTERGENIC REGION
4410	17438	30328	5.3	8.0E-03	BF363327.1	EST_HUMAN	QV0-FN0181-140700-304-g10 FN0181 Homo sapiens cDNA
4747	17767	30662	0.65	8.0E-03	P03181	SWISSPROT	GM4-NN0119-300600-223-b05 NN0119 Homo sapiens cDNA
4747	17767	30663	0.65	8.0E-03	P03181	SWISSPROT	HYPOTHETICAL BHLF1 PROTEIN
							HYPOTHETICAL BHLF1 PROTEIN
5601	18697	31668	2.68	8.0E-03	AF110520.1	NT	Mus musculus major histocompatibility complex region NG27, NG28, RPS28, NADH oxidoreductase, NG28, KIFC1, Fas-binding protein, BING1, tapasin, RafGDS-like, KE2, BING4, beta 1,3-galactosyl transferase, and RPS18 genes, complete cds; Sacm21 gene, partial>
6323	25658	32635	1.39	8.0E-03	AP000002.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 287001-544000 nt. position (27)
6913	19966	33261	4.24	8.0E-03	P55577	SWISSPROT	PROBABLE PEPTIDASE YANA
7104	20038		1.4	8.0E-03	V01109.1	NT	Human BK virus (strain MM) genome. (Closely related to SV40.)
7415	20362	33733	1.88	8.0E-03	M17197.1	NT	A.californica (marine gastropod mollusc) neuropeptide gene (bag cell), exon 1, 5' end
7790	20743		1.81	8.0E-03	AB038267.1	NT	Tursiops truncatus mRNA for p40-phox, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9235	22201	35631	0.58	8.0E-03	P88160	SWISSPROT	BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR (HSPG) (PERLECAN) (PLC)
9261	22227	36657	3.77	8.0E-03	AW808682.1	EST_HUMAN	MR1-ST0111-111199-011-H08 ST0111 Homo sapiens cDNA
9270	22236	35065	0.52	8.0E-03	AL138075.2	NT	Campylobacter jejuni NCTC11168 complete genome; segment 2/8
9331	22298	35726	0.58	8.0E-03	97898568	NT	Mus musculus fusion 2 (human) (Fus2), mRNA
10308	23232		5.16	8.0E-03	BE088509.1	EST_HUMAN	QV1-BT0677-040400-131-g03 BT0677 Homo sapiens cDNA
11118	24078	37602	1.96	8.0E-03	BE788441.1	EST_HUMAN	601475619F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3878405 5'
11330	24280		2.66	8.0E-03	Z49652.1	NT	S. cerevisiae chromosome X reading frame ORF YJR152w
11849	24586	38156	2.59	8.0E-03	BF363327.1	EST_HUMAN	CM4-NIN0119-300800-223-505 NIN0119 Homo sapiens cDNA
11710	24675	38252	1.55	8.0E-03	AA828817.1	EST_HUMAN	cd80a09.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:1374232
11710	24675	38253	1.55	8.0E-03	AA828817.1	EST_HUMAN	cd80a09.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:1374232
12024	24900	38495	3.74	8.0E-03	AF084589.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
12205	25047		2.04	8.0E-03	M69035.1	NT	Oryctolagus cuniculus eIF-2a kinase mRNA, complete cds
12249	25077		2.6	8.0E-03	AB038161.1	NT	Homo sapiens ABCG1 gene for ABC transporter (ATP-binding cassette, sub-family G (WHITE), member 1), complete cds
695	13757	26887	18.14	7.0E-03	AF097183.1	NT	Cryptosporidium parvum HC-10 gene, complete cds
695	13757	26888	18.14	7.0E-03	AF097183.1	NT	Cryptosporidium parvum HC-10 gene, complete cds
978	14029	26983	4.66	7.0E-03	AF243376.1	NT	Glycine max glutathione S-transferase GST 21 mRNA, partial cds
1118	14162	27113	4.38	7.0E-03	AV731712.1	EST_HUMAN	AV731712 HTF Homo sapiens cDNA clone HTFAZF10 5'
1368	14400		1.16	7.0E-03	Q61060	SWISSPROT	FORKHEAD BOX PROTEIN D3 (HNF3/FH TRANSCRIPTION FACTOR GENESIS) (HEPATOCYTE NUCLEAR FACTOR 3 FORKHEAD HOMOLOG 2) (HFH-2)
1398	14430	27399	3.03	7.0E-03	AA688298.1	EST_HUMAN	ab79609.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:853145 3'
1502	14535	27506	3.04	7.0E-03	AW303598.1	EST_HUMAN	xv21b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813739 3'
1768	14785	27769	1.03	7.0E-03	AW950556.1	EST_HUMAN	EST1382628 MAGE resequences, MAGA Homo sapiens cDNA
1768	14785	27770	1.03	7.0E-03	AW950556.1	EST_HUMAN	EST1382626 MAGE resequences, MAGA Homo sapiens cDNA
2267	15888	28307	2.08	7.0E-03	P04928	SWISSPROT	HISTIDINE-RICH GLYCOPROTEIN PRECURSOR
3571	16616	28637	0.67	7.0E-03	AI180273.1	EST_HUMAN	q34h02.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1751655 3'
3778	16820	28728	0.93	7.0E-03	AW444463.1	EST_HUMAN	UH-HB13-akb-c-10-0-UI.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733691 3'
3825	16865	29769	1.45	7.0E-03	AF186344.1	NT	Rattus norvegicus neuronal nicotinic acetylcholine receptor subunit (Alpha10) mRNA, complete cds
4048	16820	29728	0.83	7.0E-03	AW444463.1	EST_HUMAN	UH-HB13-akb-c-10-0-UI.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733691 3'
4366	17393		0.66	7.0E-03	U60086.1	NT	Dicystidium discoideum multidrug resistance transporter/Sar protease (tagC) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4595	17598		1	7.0E-03	AW117711.1	EST_HUMAN	x63409.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2809033 3' similar to TR:Q12887 Q12887
4623	17650		1.47	7.0E-03	AW630888.1	EST_HUMAN	ACIDIC 82 KDA PROTEIN ;
5024	18038		1.81	7.0E-03	AL163278.2	NT	h89a05.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2869936 5'
5228	18234	31108	1.4	7.0E-03	AV724419.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C078
5228	18234	31109	1.4	7.0E-03	AV724419.1	EST_HUMAN	AV724419 HTB Homo sapiens cDNA clone HTBCE08 5'
							AV724419 HTB Homo sapiens cDNA clone HTBCE08 5'
5918	19004		0.83	7.0E-03	H71108.1	EST_HUMAN	y82p01.j1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:211824 5' similar to
6233	25656		5.11	7.0E-03	AW861059.1	EST_HUMAN	gbX14723 CLUSTERIN PRECURSOR (HUMAN);
6447	19512	32762	1.38	7.0E-03	W68251.1	EST_HUMAN	RC1-CTD288-050400-018-c08 CT0288 Homo sapiens cDNA
6687	19744	33019	3.16	7.0E-03	AA327128.1	EST_HUMAN	z633f10.j1 Soares fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:342476 5'
							EST30674 Cdon I Homo sapiens cDNA 5' and
6717	19773	33052	0.91	7.0E-03	BE857395.1	EST_HUMAN	7g94b10.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3308347 3' similar to TR:Q13387
7284	20061	33367	1.92	7.0E-03	BE928133.1	EST_HUMAN	Q13387 HYPOTHETICAL PROTEIN 394D8_2 contains TAR1.2 TAR1 repetitive element ;
7763	20716	34088	5.31	7.0E-03	Z35838.1	NT	CM2-CTD478-230800-347-b11 CT0478 Homo sapiens cDNA
7763	20716	34089	5.31	7.0E-03	Z35838.1	NT	S.cerevisiae chromosome II reading frame ORF_YBL077W
8180	21150	34557	0.45	7.0E-03	AJ229043.1	NT	S.cerevisiae chromosome II reading frame ORF_YBL077W
8180	21150	34558	0.45	7.0E-03	AJ229043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
8448	21417	34630	2.46	7.0E-03	BE175697.1	EST_HUMAN	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
8961	21927	35354	0.49	7.0E-03	AF281074.1	NT	RC6-HT0682-160300-011-D02 HT0582 Homo sapiens cDNA
9752	22693		0.71	7.0E-03	AF111168.2	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
							Homo sapiens sarin palmitoyl transferase, subunit II gene, complete cds, and unknown genes
							y49c10.a1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:246088 3' similar to contains
							Alu repetitive element
9853	22880	36344	0.85	7.0E-03	N52378.1	EST_HUMAN	
10078	23005	36475	2.84	7.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10078	23005	36476	2.84	7.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10688	23590		1.06	7.0E-03	AV687378.1	EST_HUMAN	AV687378 GK Homo sapiens cDNA clone GKCAFC07 5'
10853	23773		0.95	7.0E-03	AI789734.1	EST_HUMAN	wc37e09.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:2320840 3'
11176	24132	37682	2.23	7.0E-03	AB008882.1	NT	Bos taurus mRNA for NDP52, complete cds
11248	24201	37722	1.51	7.0E-03	AJ004982.1	NT	Homo sapiens partial MUC5B gene, exon 1-29
11248	24201	37723	1.51	7.0E-03	AJ004982.1	NT	Homo sapiens partial MUC5B gene, exon 1-29
							Homo sapiens partial MUC5B gene, exon 1-29
12734	25977		1.53	7.0E-03	H94065.1	EST_HUMAN	y15n01.a1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:242833 3' similar to contains
12741	25391		1.91	7.0E-03	BE263253.1	EST_HUMAN	Alu repetitive element
12834	25451		1.99	7.0E-03	Y1455.1	NT	60114515AF2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160476 5'
							Homo sapiens LSFR2 gene, penultimate exon

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1245	14282	27244	9.96	6.0E-03	AW511148.1	EST_HUMAN	h422a05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910224 3' similar to SW_PXR_HUMAN 075469 ORPHAN NUCLEAR RECEPTOR PXR ;
1245	14282	27245	9.96	6.0E-03	AW511148.1	EST_HUMAN	h422a05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910224 3' similar to SW_PXR_HUMAN 075469 ORPHAN NUCLEAR RECEPTOR PXR ;
2782	15774	28763	1.32	6.0E-03	AF112374.1	NT	Danio rerio odorant receptor gene cluster
2901	15960	28870	4.82	6.0E-03	AA759135.1	EST_HUMAN	ah78e11.s1 Soares_testis_NHT Homo sapiens cDNA clone 1321772 3'
2901	15960	28880	4.82	6.0E-03	AA759135.1	EST_HUMAN	ah78e11.s1 Soares_testis_NHT Homo sapiens cDNA clone 1321772 3'
3280	16314		2.28	6.0E-03	H75690.1	EST_HUMAN	y77h04.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:211351 5'
3393	16442	29368	1.3	6.0E-03	U60880.1	NT	Fugu rubripes zinc finger protein, isotocin, fatty acid binding protein, sepiapterin reductase and vasodoch genes, complete cds
3393	16442	29369	1.3	6.0E-03	U60880.1	NT	Fugu rubripes zinc finger protein, isotocin, fatty acid binding protein, sepiapterin reductase and vasodoch genes, complete cds
3557	16803		1.28	6.0E-03	W37985.1	EST_HUMAN	zc13a11.r1 Soares_parenchymal_tumor_NibHPA Homo sapiens cDNA clone IMAGE:322172 5'
3572	16715	29829	4.48	6.0E-03	BF510986.1	EST_HUMAN	UH-B14-apm-c-06-0-U1.s1 NC1 CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3087754 3'
3708	16761	29867	1.21	6.0E-03	BE077353.1	EST_HUMAN	RC1-BT0806-260400-014-e07 BT0806 Homo sapiens cDNA
3790	16831	29737	1.19	6.0E-03	6764029	NT	Mus musculus glucosaminase-6-phosphate deaminase (Gnpl), mRNA
3944	16984	29900	0.87	6.0E-03	AW847284.1	EST_HUMAN	RCO-GT0204-240899-021-b10 GT0204 Homo sapiens cDNA
3979	17019		0.9	6.0E-03	BE250108.1	EST_HUMAN	600942904F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2859513 5'
4391	17410		1.81	6.0E-03	AI016833.1	EST_HUMAN	o33c11.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1639124 3'
4724	17744	30635	5.97	6.0E-03	AA324242.1	EST_HUMAN	EST27116 Cerebellum II Homo sapiens cDNA 5' end similar to EST containing Abu repeat
6276	25657	32581	0.9	6.0E-03	9627821	NT	Varidola virus, complete genome
6989	20212	33541	0.87	6.0E-03	O14994	SWISSPROT	SYNAPSIN III
7034	18366	31253	0.64	6.0E-03	BE253748.1	EST_HUMAN	601112363F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3363172 5'
7461	20427	33763	0.83	6.0E-03	AA289442.1	EST_HUMAN	EST11949 Uterus tumor I Homo sapiens cDNA 5' end
7461	20427	33784	0.83	6.0E-03	AA289442.1	EST_HUMAN	EST11949 Uterus tumor I Homo sapiens cDNA 5' end
7908	20851	34238	0.83	6.0E-03	AF128994.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 7-16 and complete cds
8100	21036	34436	0.62	6.0E-03	P17894	SWISSPROT	RAS-RELATED PROTEIN RAP-28
8136	21073	34473	0.5	6.0E-03	AJ243211.1	NT	Homo sapiens DMBT1 candidate tumour suppressor gene, exons 1 to 55
8191	21161	34571	6.58	6.0E-03	AI033980.1	EST_HUMAN	ow13a04.x1 Soares_parenchymal_tumor_NibHPA Homo sapiens cDNA clone IMAGE:1646670 3' similar to contains MER10.b1 MER10 repetitive element ;
8307	21276	34687	2.54	6.0E-03	AW798337.1	EST_HUMAN	RCO-UM0051-270300-032-g02 UM0051 Homo sapiens cDNA
8381	21350		1.61	6.0E-03	BF038198.1	EST_HUMAN	601454915F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3858628 5'
8912	22733	36168	8.57	6.0E-03	D10548.1	NT	Subacute sclerosing panencephalitis (SSPE) virus mRNA for fusion protein

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10403	23325		2.08	6.0E-03	A432861.1	EST_HUMAN	U22022.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2131202 3' similar to SW-613A_HUMAN
10523	23445	36943	0.87	6.0E-03	AJ011849.1	NT	P40429 60S RIBOSOMAL PROTEIN L13A ;
10669	23581		1.03	6.0E-03	AF084555.1	NT	Bacillus subtilis ferD gene
10769	23680	37187	0.68	6.0E-03	X683363.1	NT	Homo sapiens diethyl acid-inducible and cAMP-regulated phosphoprotein 19 (ARPP-19) mRNA, complete cds
11098	24066	37680	1.61	6.0E-03	AW962164.1	EST_HUMAN	M.thermophilum complete plasmid pFV1 DNA
11162	24120		1.55	6.0E-03	11545814	NT	EST374237 MAGE resequences, MAGG Homo sapiens cDNA
11327	24277		3.98	6.0E-03	U14556.1	NT	Homo sapiens hypothetical zinc finger protein FLJ14011 (FLJ14011), mRNA
11328	24278	37805	2.65	6.0E-03	BE737895.1	EST_HUMAN	Mus musculus zinc-finger protein mRNA, complete cds
12319	25123		2.28	6.0E-03	AF010498.1	NT	601572746F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3839747 5'
12422	25812		1.52	6.0E-03	BF871185.1	EST_HUMAN	Rhodobacter capsulatus strain SB1003, partial genome
12446	25744		5.26	6.0E-03	AE000833.1	NT	602151024F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4282212 5'
12525	25807		2.71	6.0E-03	U30790.1	NT	Methanobacterium thermoautotrophicum from bases 429182 to 450298 (section 39 of 148) of the complete genome
12578	25285		1.48	6.0E-03	Q62209	SWISSPROT	Pneumocystis carinii f. sp. ratii guanine nucleotide binding protein alpha subunit (pgc1) gene, complete cds
12850	25459		2.16	6.0E-03	BE788018.1	EST_HUMAN	SYNAPTONEMAL COMPLEX PROTEIN 1 (SCP-1 PROTEIN)
12869	25471		1.53	6.0E-03	AJ245480.1	NT	601482821F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3885388 5'
13043	25594		1.76	6.0E-03	BF110238.1	EST_HUMAN	Brassica napus sig gene for S-locus glycoprotein, cultivar T2
670	13735	26861	2.34	5.0E-03	L25105.1	NT	7n36b11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3568584 3'
670	13735	26862	2.34	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORFB; aminocycl-RNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
671	13735	26861	3.43	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORFB; aminocycl-RNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
671	13735	26862	3.43	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORFB; aminocycl-RNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
1114	14158	27108	1.03	5.0E-03	AJ010457.1	NT	Chlamydia trachomatis partial ORFB; aminocycl-RNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
1674	14607		1.02	5.0E-03	A1198977.1	EST_HUMAN	Arabidopsis thaliana mRNA for DEAD box RNA helicase, RH3
2890	15888	28703	2.63	5.0E-03	AB033008.1	NT	q79d05.x1 Soares_besf1 NHT Homo sapiens cDNA clone IMAGE:1735688 3'
2947	16005	28830	3.68	5.0E-03	BE268057.1	EST_HUMAN	Homo sapiens mRNA for KIAA1180 protein, partial cds
3153	16210	28726	3.98	5.0E-03	T87623.1	EST_HUMAN	601194796F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538798 5'
3169	16224		3.05	5.0E-03	AL161491.2	NT	y881809.s1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:22395 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3181	16236	29153	1.22	5.0E-03	R71794.1	EST_HUMAN	y88g02.s1 Soares breast 2N1bH8et Homo sapiens cDNA clone IMAGE:155668 3'
3291	16344		0.94	5.0E-03	AJ297397.1	NT	Homo sapiens partial LIMD1 gene for LIM domains containing protein 1 and KIAA0851 gene
3679	16722	29635	0.97	5.0E-03	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
3713	16756	29670	4.03	5.0E-03	AF147449.2	NT	Pseudomonas aeruginosa strain PAO1 penicillin-binding protein 1B (penB) gene, complete cds
3771	16813	29722	1	5.0E-03	U38914.1	NT	Citrus sinensis seed storage protein citrin mRNA, complete cds
3995	17035		2	5.0E-03	AA296675.1	EST_HUMAN	EST12218 Uterus tumor 1 Homo sapiens cDNA 5' end
4333	17361	30246	0.69	5.0E-03	H78355.1	EST_HUMAN	yu78g10.f1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:240068 5'
4335	16813	29722	1.02	5.0E-03	U38914.1	NT	Citrus sinensis seed storage protein citrin mRNA, complete cds
4601	17622	30515	1.02	5.0E-03	U46891.1	NT	Human putative chromatin structure regulator (SUPT6H) mRNA, complete cds
4638	17659	30546	1.13	5.0E-03	AJ131016.1	NT	Homo sapiens SCL gene locus
4749	17798	30685	1.34	5.0E-03	AJ752367.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
4970	17986	30876	1.08	5.0E-03	P15286	SWISSPROT	SPERM MITOCHONDRIAL CAPSULE SELENOPROTEIN (MCS)
5222	18230	31105	1.89	5.0E-03	6754029	NT	Mus musculus glucose-6-phosphate dehydrogenase (G6pd), mRNA
5893	18961	32172	5.89	5.0E-03	P35500	SWISSPROT	SODIUM CHANNEL PROTEIN PARA (PARALYTIC PROTEIN)
							PROBABLE UBIQUITIN CARBOXYL-TERMINAL HYDROLASE FAF-Y (UBIQUITIN THIOLESTERASE FAF-Y) (UBIQUITIN-SPECIFIC PROCESSING PROTEASE FAF-Y) (DEUBIQUITINATING ENZYME FAF-Y) (FAT FACETS PROTEIN RELATED, Y-LINKED) (UBIQUITIN-SPECIFIC PROTEASE 9, Y)
6182	19237	32468	2.97	5.0E-03	O00507	SWISSPROT	CHROMOSOME
6198	18272		0.88	5.0E-03	AE002234.2	NT	Chlamydia pneumoniae AR39, section 62 of 94 of the complete genome
6747	19801		7.44	5.0E-03	BE300091.1	EST_HUMAN	800944564T1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860871 3'
7023	18355	31274	7.12	5.0E-03	AB025024.1	NT	Mus musculus AMD1 gene for S-adenosylmethionine decarboxylase, complete cds
7240	19975		0.82	5.0E-03	AB038287.1	NT	Tursiops truncatus mRNA for p40-phox, complete cds
7295	20267	33602	0.57	5.0E-03	6753651	NT	Mus musculus dynein, axon, heavy chain 11 (Dnahc11), mRNA
7727	20683	34047	0.62	5.0E-03	T05124.1	EST_HUMAN	EST03012 Fetal brain, Striatum (cat8338208) Homo sapiens cDNA clone HFBCR83 similar to EST containing Alu repeat
7858	20801		1.17	5.0E-03	AW854327.1	EST_HUMAN	RC3-CT02555-031089-011-f07 CT02555 Homo sapiens cDNA
8044	20581	34378	6.8	5.0E-03	AB016816.1	NT	Homo sapiens MASL1 mRNA, complete cds
8087	21033	34431	0.49	5.0E-03	Q8R001	SWISSPROT	ADAM-TS 5 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 5) (ADAMTS-5) (ADAM-TS5) (AGGREGANASE-2) (ADMP-2) (IMPLANTIN)
8097	21033	34432	0.49	5.0E-03	Q8R001	SWISSPROT	ADAM-TS 5 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 5) (ADAMTS-5) (ADAM-TS5) (AGGREGANASE-2) (ADMP-2) (IMPLANTIN)
8581	21549	34967	2.12	5.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
8959	21925		5.83	5.0E-03	M61132.1	NT	Mouse complement receptor (CR2) mRNA, 3' end

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9159	22125	35554	1.08	5.0E-03	D90723.1	NT	Escherichia coli genomic DNA. (19.1 - 19.4 min)
9292	22258	35988	0.61	5.0E-03	M25090.1	NT	Rabbit uteroglobin (UGL) gene, exon 1
10189	23124	36911	0.97	5.0E-03	L21710.1	NT	Plasmodium berghei 58 kDa phosphoprotein mRNA, partial cds
10330	23254	36732	0.68	5.0E-03	AW821888.1	EST_HUMAN	ROO-ST0379-210100-032-c02 ST0379 Homo sapiens cDNA
10518	23440	36838	0.44	5.0E-03	AA533143.1	EST_HUMAN	nt48h10.s1 NCI_CGAP_P19 Homo sapiens cDNA clone IMAGE:385587
10696	23618	37112	0.47	5.0E-03	7682557	NT	Homo sapiens PRO0471 protein (PRO0471), mRNA
10844	23764		0.51	5.0E-03	AA653261.1	EST_HUMAN	ag46c10.s1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:1126200 3'
11075	24037		4.17	5.0E-03	T19586.1	EST_HUMAN	694F Heart Homo sapiens cDNA clone 694
11287	24237	37764	2.15	5.0E-03	AW170334.1	EST_HUMAN	xt58g05.x1 Soares_NHCC_cervical_tumor Homo sapiens cDNA clone IMAGE:2688040 3' similar to contains L1.12 L1 repetitive element;
11287	24237	37765	2.15	5.0E-03	AW170334.1	EST_HUMAN	xt58g05.x1 Soares_NHCC_cervical_tumor Homo sapiens cDNA clone IMAGE:2688040 3' similar to contains L1.12 L1 repetitive element;
11381	24328	37657	1.66	5.0E-03	T49163.1	EST_HUMAN	y509e04.r1 Stratiogene placenta (#637225) Homo sapiens cDNA clone IMAGE:70888 5'
11659	24595		3.62	5.0E-03	BE048055.1	EST_HUMAN	tz48c04.y1 NCI_CGAP_Bim52 Homo sapiens cDNA clone IMAGE:2291622 5'
12463	25938		5.42	5.0E-03	AF047874.1	NT	Galus gallus glyceraldehyde-3-phosphate dehydrogenase mRNA, complete cds
12595	25298		3.7	5.0E-03	AF067253.1	NT	Brugia malayi Y chromosome marker
12688	26355		3.19	5.0E-03	L10347.1	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
12718	26372		1.89	5.0E-03	AA456567.1	EST_HUMAN	zx75603.s1 Soares ovary tumor NHOT Homo sapiens cDNA clone IMAGE:808548 3' similar to SW-DXA2_MOUSE P14685 PROBABLE DIAPHENOL OXIDASE A2 COMPONENT;
12743	25752		5.67	5.0E-03	BF572332.1	EST_HUMAN	602077774F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4252002 5'
12822	25498	31702	3.21	5.0E-03	AW449109.1	EST_HUMAN	UHH-BIS-ekf-4-08-0-J1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2734215 3'
235	13335	26269	2.6	4.0E-03	AW500186.1	EST_HUMAN	UHF-BNO-eko-h-04-0-J1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076831 5'
321	13413	26337	2.12	4.0E-03	R49482.1	EST_HUMAN	y951604.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:35988 3'
443	13516	26449	1.15	4.0E-03	P54675	SWISSPROT	PHOSPHATIDYLINOSITOL 3-KINASE 3 (PI3-KINASE) (PI3K)
605	13672	26596	4.63	4.0E-03	AA939330.1	EST_HUMAN	on75g12.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1602568 3'
878	13933	26893	1.9	4.0E-03	R49482.1	EST_HUMAN	y951604.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:35988 3'
912	13967		3.64	4.0E-03	AW749101.1	EST_HUMAN	RC3-BT0333-110100-012-01 BT0333 Homo sapiens cDNA
1163	14195	27147	27.01	4.0E-03	AA099777.1	EST_HUMAN	z81a08.r1 Stratiogene colon (#637204) Homo sapiens cDNA clone IMAGE:510898 5'
1173	14214	27169	1.92	4.0E-03	AW794740.1	EST_HUMAN	RC8-UM0014-170400-023-G01 UM0014 Homo sapiens cDNA
1308	14342	27306	1.5	4.0E-03	AA284374.1	EST_HUMAN	z55a01.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:701736 5'
1690	14622		1.64	4.0E-03	AV708305.1	EST_HUMAN	AV708305 ADC Homo sapiens cDNA clone ADCAKB06 5'
1758	14787	27772	2.38	4.0E-03	U33472.1	NT	Rattus norvegicus type 1 astrocyte and olfactory-limbic associated protein AT1-48 mRNA, complete cds
2034	15053	28070	11.42	4.0E-03	AA099777.1	EST_HUMAN	z81a08.r1 Stratiogene colon (#637204) Homo sapiens cDNA clone IMAGE:510898 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2259	15273		1.89	4.0E-03	BE410553.1	EST_HUMAN	601304161F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638510 5'
2286	15299	28323	1.53	4.0E-03	AW794740.1	EST_HUMAN	RC8-UM0014-170400-023-G01 UM0014 Homo sapiens cDNA
2579	15580	28508	1.75	4.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
2579	15580	28508	1.75	4.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
2701	15697	28712	3.92	4.0E-03	AJ277395.1	NT	Homo sapiens polyglutamine-containing C14ORF4 gene
2701	15697	28713	3.92	4.0E-03	AJ277395.1	NT	Homo sapiens polyglutamine-containing C14ORF4 gene
2707	15702	28716	1.88	4.0E-03	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
3239	16294	29217	1.04	4.0E-03	BE154134.1	EST_HUMAN	PM1-HT0340-151289-003-H08 HT0340 Homo sapiens cDNA
3239	16294	29218	1.04	4.0E-03	BE154134.1	EST_HUMAN	PM1-HT0340-151289-003-H08 HT0340 Homo sapiens cDNA
3541	16597	29510	0.8	4.0E-03	AW188426.1	EST_HUMAN	X8804.x1 NCI_CGAP_Cor18 Homo sapiens cDNA clone IMAGE:2685279 3'
3541	16597	29511	0.8	4.0E-03	AW188426.1	EST_HUMAN	X8804.x1 NCI_CGAP_Cor18 Homo sapiens cDNA clone IMAGE:2685279 3'
3639	16882	29597	0.84	4.0E-03	Q13808	SWISSPROT	OLFACTORY RECEPTOR 51 (OLFACTORY RECEPTOR-LIKE PROTEIN OLF1)
4020	17038		2.14	4.0E-03	AJ011712.1	NT	Homo sapiens TNNT1 gene, exons 1-11 (and joined CDS)
4843	17884	30553	1.1	4.0E-03	AF32754.1	EST_HUMAN	ab18003.v5 Stratiene lung (#837210) Homo sapiens cDNA clone IMAGE:841142 3' similar to contains Alu repetitive element
4805	17822	30717	3.73	4.0E-03	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
6173	18182	31059	0.88	4.0E-03	AW103719.1	EST_HUMAN	X86303.x1 NCI_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2614489 3' similar to contains L1.11 L1
5220	18228	31102	0.83	4.0E-03	AA699995.1	EST_HUMAN	L1 repetitive element
5272	18278	31142	0.93	4.0E-03	J02187.1	NT	z68b01.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:436008 3'
5348	18453	31324	1.56	4.0E-03	AF005859.1	NT	Foot and mouth disease virus serotype A-12 118ab capsid protein VP3
5473	18574	31492	23.1	4.0E-03	AF169825.1	NT	Drosophila melanogaster aron2D7 (aron2D7) mRNA, complete cds
5891	18979	32171	2.72	4.0E-03	P04198	SWISSPROT	Rattus norvegicus beta-catenin binding protein mRNA, complete cds
5895	18983	32173	1.83	4.0E-03	P21849	SWISSPROT	(HPRG)
5893	19068	32266	0.87	4.0E-03	AL133871.1	EST_HUMAN	MAJOR SURFACE-LABELED TROPHOBLAST ANTIGEN PRECURSOR
6203	19277		3.56	4.0E-03	U22190.1	NT	DKFZp7911014.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp7911014 5'
6381	19430	32673	1	4.0E-03	AW590572.1	EST_HUMAN	Rattus norvegicus opsin gene, complete cds
6442	19507	32757	1.78	4.0E-03	BE548453.1	EST_HUMAN	hg46c07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2949552 3'
6827	19881	33172	0.87	4.0E-03	AA813222.1	EST_HUMAN	601076016F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3481954 5'
6942	20168	33489	1.5	4.0E-03	U76408.1	NT	q32H11.s1 Soares_testis_NHT Homo sapiens cDNA clone 1392045 3'
							Lycopodium obscurum knotted 3 protein (TKn3) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7273	20008	33308	1.22	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
7273	20008	33309	1.22	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
7404	20372	33723	4.12	4.0E-03	Q02817	SWISSPROT	MUCIN 2 PRECURSOR (INTESTINAL MUCIN 2)
7665	20624	33888	0.99	4.0E-03	AI681483.1	EST_HUMAN	b37g12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2271814 3'
7667	20628	33900	0.72	4.0E-03	BE870170.1	EST_HUMAN	7c31b02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284043 3'
7767	20720		0.68	4.0E-03	X92109.1	NT	H. sapiens hogIX gene
8274	21243	34655	0.49	4.0E-03	Q9T192	SWISSPROT	ADAM-TS 5 (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 6)
8383	21362	34781	5.06	4.0E-03	AF111944.1	NT	DICTYOSTELIUM AX4 development protein DG1122 (DG1122) gene, partial cds
8545	21513	34830	1.92	4.0E-03	7662067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
9084	22030	35453	7.41	4.0E-03	AI539893.1	EST_HUMAN	1a49b11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090013 3' similar to contains Alu repetitive element
9241	22207		4.72	4.0E-03	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
9250	22216	35646	3.66	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
10287	23212	36695	0.57	4.0E-03	H30684.1	EST_HUMAN	yp42g12.t1 Soares retina N2b5HR Homo sapiens cDNA clone IMAGE:190150 5'
10742	23684	37159	0.79	4.0E-03	AL161555.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 55
11176	24133	37663	1.65	4.0E-03	AW513635.1	EST_HUMAN	xo47h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2707159 3'
11464	24407	37954	4.53	4.0E-03	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
12431	25958		1.52	4.0E-03	BE81673.1	EST_HUMAN	PM4-BN0138-180600-002-b08 BN0138 Homo sapiens cDNA
12454	25213		3.2	4.0E-03	BE298290.1	EST_HUMAN	601118164F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028086 5'
12533	25259		2.13	4.0E-03	AW504273.1	EST_HUMAN	U1-HF-BNO-elp-g-04-Q-U1T1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3090622 5'
12755	25400		7.22	4.0E-03	BF224125.1	EST_HUMAN	7q74c09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3' similar to contains Alu repetitive element; contains element MER31 repetitive element;
12801	25868		3.31	4.0E-03	AW614598.1	EST_HUMAN	h102c07.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2953932 3' similar to contains element LTR5 repetitive element;
12814	25437		2.73	4.0E-03	AW819141.1	EST_HUMAN	RC3-ST0281-240400-015-f03 ST0281 Homo sapiens cDNA
13093	25619	31676	6.48	4.0E-03	11436955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
371	13457	26387	1.69	3.0E-03	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
880	13635	26894	3.09	3.0E-03	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
1689	14701	27676	5.52	3.0E-03	AA468110.1	EST_HUMAN	nc73c05.s1 NCI_CGAP_P12 Homo sapiens cDNA clone IMAGE:782984 similar to contains Alu repetitive element;
2268	15281		1.58	3.0E-03	AF056068.1	NT	Homo sapiens MHC class I region
2302	15314		8.06	3.0E-03	Z32521.1	NT	S.cereale (cv. Halo) mRNA for triosephosphate isomerase
2303	15315	28334	1.3	3.0E-03	U46858.1	NT	Mus musculus intestinal trefoil factor gene, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2303	15315	28335	1.3	3.0E-03	U46858.1	NT	Mus musculus intestinal trefoil factor gene, partial cds
3008	16084		0.8	3.0E-03	Y09006.1	NT	Arabidopsis thaliana rpoMt gene
3089	16156	28068	4.09	3.0E-03	BE378296.1	EST_HUMAN	601237982F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609833 5'
3168	16221	28136	2.54	3.0E-03	AW802887.1	EST_HUMAN	IL2-UM0076-240300-058-D03 UM0076 Homo sapiens cDNA
3428	16476	28395	1.62	3.0E-03	U34606.1	NT	Mus musculus alpha-1(XVII) collagen (COL18A1) gene, exon 1 and 2
3439	16486		6.72	3.0E-03	Y12500.1	NT	C.elegans samdc gene
4002	17041	28949	7.18	3.0E-03	AV762392.1	EST_HUMAN	AV762392 MDS Homo sapiens cDNA clone MDSBSG01 5'
4002	17041	28950	7.18	3.0E-03	AV762392.1	EST_HUMAN	AV762392 MDS Homo sapiens cDNA clone MDSBSG01 5'
4067	17103	28995	1.47	3.0E-03	AI792278.1	EST_HUMAN	af04809.5 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1155889 5'
4177	17208		1.08	3.0E-03	Z32521.1	NT	S.cereale (cv. Halo) mRNA for triosephosphate isomerase
4424	17451	30342	3.8	3.0E-03	AJ011432.1	NT	Rattus norvegicus gdnf gene
4546	17569	30458	5.58	3.0E-03	AJ636141.1	EST_HUMAN	xu8.P10.H3 conom Homo sapiens cDNA 3'
							ab18408.v5 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:841142 3' similar to contains Alu repetitive element
4871	17888	30776	1.74	3.0E-03	AF32754.1	EST_HUMAN	601482715F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3885483 5'
4890	17907	30798	5.49	3.0E-03	BE787945.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10539 (FLJ10539), mRNA
5338	18443	31196	3.42	3.0E-03	8822499	NT	Mus musculus mRNA for hypothetical protein (ORF2 ortholog)
5635	18731	31893	1.22	3.0E-03	AJ248681.1	NT	Mus musculus H2-M alpha chain (H2-Ma) gene, H2-M beta 2 chain (H2-Mb2) gene, H2-M beta 1 chain (H2-Mb1) gene, low molecular weight protein 2 Lmp2 (Lmp2) gene, complete cds
							aa13f10.r1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:813163 5'
5708	18803	31980	0.95	3.0E-03	U35323.1	NT	Fugu rubripes mRNA for sodium channel alpha subunit, partial cds
6705	19781	33040	10.04	3.0E-03	AA456701.1	EST_HUMAN	Kluyveromyces fragilis pcp3 gene for purine-cytosine permease
7224	20246	33580	0.65	3.0E-03	D37877.1	NT	Oryza sativa gene for bZIP protein, complete cds
7412	20379	33730	1.37	3.0E-03	AJ011419.1	NT	DNA REPAIR HELICASE RAD15 (RHP3)
7765	20718	34091	3.16	3.0E-03	AB021738.1	NT	RCO-BT0812-250800-032-607 BT0812 Homo sapiens cDNA
8145	21082	34481	0.49	3.0E-03	P26859	SWISSPROT	RCO-BT0812-250800-032-607 BT0812 Homo sapiens cDNA
8270	21239	34650	0.91	3.0E-03	BF333058.1	EST_HUMAN	RCO-BT0812-250800-032-607 BT0812 Homo sapiens cDNA
8270	21239	34651	0.91	3.0E-03	BF333058.1	EST_HUMAN	RCO-BT0812-250800-032-607 BT0812 Homo sapiens cDNA
8496	21464	34880	1.31	3.0E-03	N62580.1	EST_HUMAN	z527804.s1 Soares parathyroid tumor NBtPA Homo sapiens cDNA clone IMAGE:304788 3'
8658	21628		0.77	3.0E-03	M63468.1	NT	S.cerevisiae UGA35 gene, complete cds
8804	21771	35197	1.16	3.0E-03	P51989	SWISSPROT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 HOMOLOG 1 (HNRNP A2(A))
8827	21794	35217	1.34	3.0E-03	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
8833	21839		1.25	3.0E-03	Q9QM81	SWISSPROT	NONSTRUCTURAL PROTEIN V
							h180f10.x1 NCI CGAP GU1 Homo sapiens cDNA clone IMAGE:2869131 3' similar to contains L1.1 L1 repetitive element
9343	22308		10.07	3.0E-03	AW613774.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, coding fragment No. 85
9400	22365	35797	4.01	3.0E-03	AL161589.2	NT	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9424	22388	35827	4.74	3.0E-03	AI016731.1	EST_HUMAN	α03412.X1 NCI_CGAP_K143 Homo sapiens cDNA clone IMAGE:1636247 3' similar to gb:567138_mna1
9434	22398	35836	0.83	3.0E-03	BF338078.1	EST_HUMAN	HISTONE H2B.2 (HUMAN);
9784	22705		0.95	3.0E-03	D98801.1	NT	602035980F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4163838 5'
9802	21125	34528	0.61	3.0E-03	BE154670.1	EST_HUMAN	Synechocystis sp. PCC6803 complete genome, 327, 271600-402288
9894	22921		0.62	3.0E-03	P03355	SWISSPROT	PM3-HT0344-071298-003-007 HT0344 Homo sapiens cDNA
10065	22862		5.33	3.0E-03	P08672	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
							CIRCUMSPOROZOTE PROTEIN PRECURSOR (CS)
							RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE;
							ENDONUCLEASE]
10255	23180	36867	1.56	3.0E-03	P11369	SWISSPROT	
10355	23279	36755	1.15	3.0E-03	P51989	SWISSPROT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 HOMOLOG 1 (HNRNP A2(A))
10489	23421	36820	4.39	3.0E-03	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
11104	24149		1.62	3.0E-03	5803028	NT	Homo sapiens ATP/GTP-binding protein (HEAB), mRNA
11708	24673	38250	1.47	3.0E-03	AF069222.1	NT	Homo sapiens cathepsin-like serine endoprotease mRNA, partial cds
11775	23830	37451	1.88	3.0E-03	AF266285.1	NT	Homo sapiens golgin-like protein (GLP) gene, complete cds
11810	24895	38275	2.27	3.0E-03	AF094481.1	NT	Homo sapiens titinucleotide repeat DNA binding protein p20-CGGBP (CGGBP) gene, complete cds
11810	24895	38276	2.27	3.0E-03	AF094481.1	NT	Homo sapiens titinucleotide repeat DNA binding protein p20-CGGBP (CGGBP) gene, complete cds
							RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE;
							ENDONUCLEASE]
11881	24763	38348	1.47	3.0E-03	P11369	SWISSPROT	
12109	25765		4.08	3.0E-03	AI525056.1	EST_HUMAN	promote-5.E07.1 b-tumor Homo sapiens cDNA 5'
12232	25004	38162	1.83	3.0E-03	AA993154.1	EST_HUMAN	c17b10.s1 Soares_tad_fetus_Nb21F8_9w Homo sapiens cDNA clone IMAGE:1822779 3' similar to
12292	25895		2.42	3.0E-03	AB009888.1	NT	contains L1.S MER28 repetitive element;
12478	26236	31794	2.01	3.0E-03	AJ296282.1	NT	Homo sapiens gene for CMP-N-acetylneuraminic acid hydroxylase, partial cds
516	13587	26508	0.92	2.0E-03	Q04652	SWISSPROT	Rattus norvegicus mRNA for connexin36 (cx36 gene)
516	13587	26507	0.92	2.0E-03	Q04652	SWISSPROT	RING CANAL PROTEIN (KELCH PROTEIN)
788	16851		12.64	2.0E-03	T70874.1	EST_HUMAN	RING CANAL PROTEIN (KELCH PROTEIN)
1365	14389	27370	1.9	2.0E-03	M20783.1	NT	y415h03.11 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:108941 5'
1368	14402	27372	1.34	2.0E-03	AA681805.1	EST_HUMAN	Human alpha-2-plasmin inhibitor gene, exons 6 and 7
1376	14410	27380	12.34	2.0E-03	AF284448.1	NT	nu88071.s1 NCI_CGAP_AW1 Homo sapiens cDNA clone IMAGE:1217583
							Homo sapiens tumor-related protein DRC2 (DRC2) gene, complete cds
1486	14519	27482	1.63	2.0E-03	P48509	SWISSPROT	PLATELET-ENDOTHELIAL TETRASPAN ANTIGEN 3 (PETA-3) (GP27) (MEMBRANE GLYCOPROTEIN
1519	14551	27522	3.03	2.0E-03	4657836	NT	SFA-1) (CD151 ANTIGEN)
							Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome
							type VI) (PLOD) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1519	14551	27523	3.03	2.0E-03	4557839	NT	Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD) mRNA
1595	14627		8.7	2.0E-03	P29400	SWISSPROT	COLLAGEN ALPHA 5(V) CHAIN PRECURSOR
1786	14815	27800	1.28	2.0E-03	AA450138.1	EST_HUMAN	zc42a10.r1 Scores_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789114 5'
2011	15032	28042	1.52	2.0E-03	AF302691.1	NT	Mus musculus myelin expression factor-3-like protein gene, partial cds
2261	15275	28299	1.02	2.0E-03	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
2594	15585		4.02	2.0E-03	AW19792.1	EST_HUMAN	U1-H-B1-adi-g-10-0-U1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717010 3'
3427	16475	28394	4.82	2.0E-03	AA450138.1	EST_HUMAN	zc42a10.r1 Scores_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789114 5'
3434	16481	28400	0.8	2.0E-03	BF568955.1	EST_HUMAN	60218390T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300070 3'
3680	16723	28636	6.1	2.0E-03	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
3973	17013	29027	0.65	2.0E-03	AB040802.1	NT	Rattus norvegicus mRNA for SREB1, complete cds
4140	17171	30059	2.1	2.0E-03	P03374	SWISSPROT	ENV POLYPROTEIN [CONTAINS: COAT PROTEIN GP52; COAT PROTEIN GP36]
4203	17234	30122	1.29	2.0E-03	AA179883.1	EST_HUMAN	zp13h01.r1 Strategene fetal retina 93702 Homo sapiens cDNA clone IMAGE:508961 5'
4248	17277		9.31	2.0E-03	U88491.1	NT	Rattus norvegicus 5-hydroxytryptamine7 receptor gene, partial cds
4468	17484		1.01	2.0E-03	AW297380.1	EST_HUMAN	U1-H-BW0-ai-g-03-0-U1.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2730413 3'
4482	17488	30375	1.11	2.0E-03	AD94746.1	EST_HUMAN	HA0507 Human fetal liver cDNA library Homo sapiens cDNA
4577	17599	30493	1.99	2.0E-03	LA2512.1	NT	Drosophila melanogaster shortighted class 2 (shs) mRNA, complete cds
4577	17599	30494	1.99	2.0E-03	LA2512.1	NT	Drosophila melanogaster shortighted class 2 (shs) mRNA, complete cds
4735	17755	30649	1.09	2.0E-03	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
4740	17760		1.84	2.0E-03	R87773.1	EST_HUMAN	yo45e02.s1 Scores adult brain Nb24-HB55Y Homo sapiens cDNA clone IMAGE:180890 3'
5054	18068	30945	0.75	2.0E-03	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5163	18172	31051	1.02	2.0E-03	AF187974.1	NT	8 Homo sapiens concentrative nucleoside transporter (CNT1) gene, exon 12
5281	18287	31149	2.28	2.0E-03	D85606.1	NT	Homo sapiens gene for cholesteryltransferin type-A receptor, complete cds
5564	18681	31607	1.33	2.0E-03	BF241410.1	EST_HUMAN	60187638F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4104682 5'
5708	25643	31961	2.18	2.0E-03	AB014563.1	NT	Homo sapiens mRNA for KIAA0693 protein, partial cds
5795	18887	32068	0.61	2.0E-03	AW796111.1	EST_HUMAN	MR2-UM0025-300300-102-402 UM0025 Homo sapiens cDNA
5795	18887	32069	0.61	2.0E-03	AW796111.1	EST_HUMAN	MR2-UM0025-300300-102-402 UM0025 Homo sapiens cDNA
5797	18889	32071	1.73	2.0E-03	U63711.1	NT	Xenopus laevis xatitin mRNA, complete cds
6231	18305	32536	3.79	2.0E-03	P23477	SWISSPROT	ATP-DEPENDENT NUCLEASE SUBUNIT B
6231	18305	32537	3.79	2.0E-03	P23477	SWISSPROT	ATP-DEPENDENT NUCLEASE SUBUNIT B
6480	19545	32793	15.16	2.0E-03	Q85203	SWISSPROT	CARBONIC ANHYDRASE-RELATED PROTEIN 2 PRECURSOR (CARP 2) (CA-RP II) (CA-XI)

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6480	19545	32794	15.16	2.0E-03	Q86203	SWISSPROT	CARBONIC ANHYDRASE-RELATED PROTEIN 2 PRECURSOR (CARP 2) (CA-XP II) (CA-XI)
6482	19547	32798	7.38	2.0E-03	BF308187.1	EST_HUMAN	601887434F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4121408 5'
6521	19594	32842	2.28	2.0E-03	Q8UKP4	SWISSPROT	ADAM-TS 7 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 7) (ADAMTS-7) (ADAM-TS7)
6522	19595	32843	0.77	2.0E-03	AV709075.1	EST_HUMAN	AV709075 ADG Homo sapiens cDNA clone ADCAEF09 5'
6554	19614	32879	1.36	2.0E-03	XQ4451.1	NT	L esculentum mRNA for lvsyl-rRNA synthetase (LysRS)
6756	19810		1.25	2.0E-03	A1891089.1	EST_HUMAN	wu38t09.x1 Soares_Dieckgraebe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2522177 3' similar to SW:RL29_HUMAN P47914 60S RIBOSOMAL PROTEIN L29 ; contains element MSR1 repetitive element ;
6794	19848	33133	0.71	2.0E-03	AA677831.1	EST_HUMAN	z13a11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430652 3'
7151	18393	31271	1.08	2.0E-03	AB038502.1	NT	Caenorhabditis elegans mRNA for galeodin LEC-11, complete cds
7287	20064	33371	2.88	2.0E-03	BE067886.1	EST_HUMAN	GM4-BT0368-061288-054-d01 BT0368 Homo sapiens cDNA
7351	20321	33988	0.64	2.0E-03	A1298883.1	EST_HUMAN	qm69d11.x1 NC1_C3GAP_Lu5 Homo sapiens cDNA clone IMAGE:1896885 3'
7511	20478	33937	0.77	2.0E-03	T86569.1	EST_HUMAN	y477g10.t1 Soares_fetal_liver_spleen_1NFLS_Homo sapiens cDNA clone IMAGE:114306 5'
7577	20821	34198	1.55	2.0E-03	P07354	SWISSPROT	PROTEOGLYCAN LINK PROTEIN PRECURSOR (CARTILAGE LINK PROTEIN) (LP)
8386	21355	34763	1.95	2.0E-03	AW592004.1	EST_HUMAN	ht37506.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834035 3' similar to TR:Q60976 Q60976 JERKY. ;
8560	21528	34947	6.01	2.0E-03	N20287.1	EST_HUMAN	y442g08.s1 Soares_melanocyte_2NblHM_Homo sapiens cDNA clone IMAGE:264442 3' similar to cortactin L1 b2 L1 repetitive element ;
8560	21528	34948	6.01	2.0E-03	N20287.1	EST_HUMAN	y442g08.s1 Soares_melanocyte_2NblHM_Homo sapiens cDNA clone IMAGE:264442 3' similar to cortactin L1 b2 L1 repetitive element ;
8607	21576	34980	0.57	2.0E-03	Q92350	SWISSPROT	HYPOTHETICAL 32.8 KD PROTEIN C8G9.05 IN CHROMOSOME I
8629	21597	35018	1.23	2.0E-03	P19137	SWISSPROT	LAMININ ALPHA-1 CHAIN PRECURSOR (LAMININ A CHAIN)
8684	21652	35074	0.77	2.0E-03	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
8684	21652	35075	0.77	2.0E-03	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
8709	21677	35102	0.81	2.0E-03	AU136879.1	EST_HUMAN	AU136879 PLACE1 Homo sapiens cDNA clone PLACE1004839 5'
8782	21726		0.67	2.0E-03	AJ400877.1	NT	Homo sapiens ASOL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
9550	18887	32068	0.66	2.0E-03	AW796111.1	EST_HUMAN	MR2-UM0025-300300-102-f02 UM0025 Homo sapiens cDNA
9550	18887	32069	0.66	2.0E-03	AW796111.1	EST_HUMAN	MR2-UM0025-300300-102-f02 UM0025 Homo sapiens cDNA
9595	22557	36007	0.66	2.0E-03	AF224698.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D) genes, complete cds
9884	22837	36281	0.97	2.0E-03	H50832.1	EST_HUMAN	yp88a09.s1 Soares_fetal_liver_spleen_1NFLS_Homo sapiens cDNA clone IMAGE:194298 3'
9884	22837	36292	0.97	2.0E-03	H50832.1	EST_HUMAN	w88a09.s1 Soares_fetal_liver_spleen_1NFLS_Homo sapiens cDNA clone IMAGE:194298 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9916	22737	36190	3.31	2.0E-03	P24821	SWISSPROT	TENASCIN PRECURSOR (TN) (HEXABRACHION) (CYTOTACTIN) (NEURONECTIN) (GMEIN) (JI) (MIOTENDINOUS ANTIGEN) (GLIOMA-ASSOCIATED-EXTRACELLULAR MATRIX ANTIGEN) (GP 150-225) (TENASCIN-C) (TN-C)
10026	22853	36421	1.02	2.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10026	22853	36422	1.02	2.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10081	23008	36479	0.65	2.0E-03	AF097732.1	NT	Homo sapiens caspase recruitment domain-containing protein (BCL10) gene, complete cds
10081	23008	36480	0.65	2.0E-03	AF097732.1	NT	Homo sapiens caspase recruitment domain-containing protein (BCL10) gene, complete cds
10275	23200	36684	0.94	2.0E-03	AF097732.1	NT	Homo sapiens caspase recruitment domain-containing protein (BCL10) gene, complete cds
10402	23324		6.44	2.0E-03	AA251378.1	EST_HUMAN	QV3-OT0084-060400-144-c01 OT0084 Homo sapiens cDNA
10781	23702	37200	0.45	2.0E-03	BF367388.1	EST_HUMAN	2s10a06.s1 NC1 CGAP_GCB1 Homo sapiens cDNA IMAGE:684754 3'
10869	23889	37401	0.43	2.0E-03	AW361176.1	EST_HUMAN	MR2-GN0030-140000-001-e05 GN0030 Homo sapiens cDNA
10869	23889	37402	0.43	2.0E-03	AW361176.1	EST_HUMAN	RC1-CT0251-141089-012-c01 CT0251 Homo sapiens cDNA
11356	24306		2.4	2.0E-03	M88524.1	NT	Human dystrophin gene
11817	20621	34198	2.2	2.0E-03	P07354	SWISSPROT	PROTEOGLYCAN LINK PROTEIN PRECURSOR (CARTILAGE LINK PROTEIN) (LP)
11870	24752		1.87	2.0E-03	BF330609.1	EST_HUMAN	RC3-BT0333-310800-115-g04 BT0333 Homo sapiens cDNA
11876	24758	36342	10.47	2.0E-03	Z11740.1	NT	H.sapiens variable number tandem repeat (VNTR) locus DNA
12180	25028		2.99	2.0E-03	AI625745.1	EST_HUMAN	Q25532 VACUOLAR ATP SYNTHASE SUBUNIT G ;
12197	25042	36823	2.41	2.0E-03	AF157516.2	NT	Homo sapiens SEL1L (SEL1L) gene, partial cds
12220	25057	36827	1.75	2.0E-03	AI084325.1	EST_HUMAN	cy43g06.s1 Scores_parallel_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1668634 3' similar to TR:P97535 P97535 PS-PLA1 PRECURSOR ;
12241	18349		11.57	2.0E-03	AJ245187.1	NT	Camelus dromedarius cwhp19 gene for immunoglobulin heavy chain variable region
12459	25932		2.03	2.0E-03	AV687966.1	EST_HUMAN	AV687966 GKC Homo sapiens cDNA clone GKC3XD05 5'
12550	25273	31777	1.93	2.0E-03	Y00508.1	NT	H. sapiens M1 gene for muscarinic acetylcholine receptor
12663	25341		1.33	2.0E-03	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
12710	25795		1.55	2.0E-03	AI375037.1	EST_HUMAN	ta69f02.x1 Scores_total_fetus_Nb2H-IF8_gw Homo sapiens cDNA clone IMAGE:2046051 3' similar to contains Alu repetitive element;
12826	25445		1.6	2.0E-03	AF129758.1	NT	Homo sapiens MSH55 gene, partial cds; and CLIC1, DDAH, G8b, G8c, G8d, G8e, G8f, BAT5, G5b, CSK2B, BAT4, G4, Apo M, BAT3, BAT2, AIF-1, 1C7, LST-1, LTB, TNF, and LTA genes, complete cds
13002	25745		1.95	2.0E-03	AV687966.1	EST_HUMAN	AV687966 GKC Homo sapiens cDNA clone GKC3XD05 5'
13095	25621		1.44	2.0E-03	P04797	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (GAPDH)
439	13513	26444	1.72	1.0E-03	H88471.1	EST_HUMAN	y68c08.r1 Scores_pituitary_gland_N3H-PG Homo sapiens cDNA clone IMAGE:232334 5'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
830	13887	28842	2.09	1.0E-03	A1720283.1	EST_HUMAN	as701008.x1 Barstead ccdon HPLR87 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR-Q13825 Q13825 AU-BINDING PROTEINENOVYL-COA HYDRATASE.;
830	13887	28843	2.09	1.0E-03	A1720283.1	EST_HUMAN	as701008.x1 Barstead ccdon HPLR87 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR-Q13825 Q13825 AU-BINDING PROTEINENOVYL-COA HYDRATASE.;
1097	14141	27081	3.37	1.0E-03	A1865788.1	EST_HUMAN	wk66a06.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2422258 3'
1117	14161	27112	1.69	1.0E-03	A1954572.1	EST_HUMAN	w03a10.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:2551242 3'
1170	14211	27165	1.5	1.0E-03	A1892816.1	EST_HUMAN	wd86a01.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2338440 3' similar to contains Alu repetitive element;
2042	15061	28082	3.08	1.0E-03	A47808	SWISSPROT	HIGH MOLECULAR WEIGHT FORM OF MYOSIN I (HMYWMI)
2163	15178	28189	8.01	1.0E-03	AJ131018.1	NT	Homo sapiens SCL gene locus
2893	16051	28972	1.42	1.0E-03	AB033117.1	NT	Homo sapiens mRNA for KIAA1281 protein, partial cds
3205	16280	29179	2.08	1.0E-03	P18915	SWISSPROT	CARBONIC ANHYDRASE VI PRECURSOR (CARBONATE DEHYDRATASE VI) (CA-VI) (SECRETED CARBONIC ANHYDRASE) (SALIVARY CARBONIC ANHYDRASE)
3205	16280	29180	2.08	1.0E-03	P18915	SWISSPROT	CARBONIC ANHYDRASE VI PRECURSOR (CARBONATE DEHYDRATASE VI) (CA-VI) (SECRETED CARBONIC ANHYDRASE) (SALIVARY CARBONIC ANHYDRASE)
3313	16368	29286	1.23	1.0E-03	P08547	SWISSPROT	CARBONIC ANHYDRASE VI PRECURSOR (CARBONATE DEHYDRATASE VI) (CA-VI) (SECRETED CARBONIC ANHYDRASE)
3553	16599	29524	0.82	1.0E-03	U68061.1	NT	Human MUC2 gene, promoter region
3553	16599	29525	0.82	1.0E-03	U68061.1	NT	Human MUC2 gene, promoter region
3678	16721		1.49	1.0E-03	AB044400.1	NT	Homo sapiens SVMT gene for synaptic vesicle monoamine transporter, exons 14, 15
3946	16986	29801	0.64	1.0E-03	AW170552.1	EST_HUMAN	contains TAR1.1 TAR1 repetitive element;
3954	16994	29810	1.11	1.0E-03	Z49649.1	NT	S cerevisiae chromosome X reading frame ORF YJR148w
4464	17490	30377	2.27	1.0E-03	BE939162.1	EST_HUMAN	RC1-TN0128-160800-021-g01 TN0128 Homo sapiens cDNA
4502	17527	30412	4.39	1.0E-03	BE246536.1	EST_HUMAN	TCBP1D4909 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBP4909
4692	17713	30608	0.78	1.0E-03	U29449.1	NT	Caenorhabditis elegans spliced leader RNA (SL3 alpha), (SL4), and (SL5) genes
4861	17878	30765	2.07	1.0E-03	A1073485.1	EST_HUMAN	ov45c04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1840282 3'
4861	17878	30766	2.07	1.0E-03	A1073485.1	EST_HUMAN	ov45c04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1840282 3'
4882	17879		4.33	1.0E-03	BE154067.1	EST_HUMAN	PMO-HT0339-200400-010-D02 HT0339 Homo sapiens cDNA
5113	18123	30938	9.53	1.0E-03	O46409	SWISSPROT	APOLIPROTEIN A-IV PRECURSOR (APO-AIV)
5202	18211	31085	1.03	1.0E-03	AV685870.1	EST_HUMAN	AV685870 GK Homo sapiens cDNA clone GKCDME11 5'
5381	18485	31360	1.74	1.0E-03	AA290951.1	EST_HUMAN	z94401.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700345 5'
5476	18577	31486	2.98	1.0E-03	AJ006345.1	NT	Homo sapiens KVLQ11 gene
5531	18629	31565	1.77	1.0E-03	KJ03332.1	NT	Epstein-Barr virus (AG876 isolate) U2-IR2 domain encoding nuclear protein EBNA2, complete cds

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5631	18629	31566	1.77	1.0E-03	K03332.1	NT	Epstein-Barr virus (AG876 isolate) U2-IR2 domain encoding nuclear protein EBNA2, complete cds
5632	18748	31916	0.93	1.0E-03	BE798491.1	EST_HUMAN	601589841F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943954 5'
5638	18754	31921	1.76	1.0E-03	Q02388	SWISSPROT	COLLAGEN ALPHA 1(VII) CHAIN PRECURSOR (LONG-CHAIN COLLAGEN) (LC COLLAGEN)
5716	18810	31988	0.7	1.0E-03	N41874.1	EST_HUMAN	y07008.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270587 5' similar to contains element MER6 repetitive element;
5716	18810	31988	0.7	1.0E-03	N41874.1	EST_HUMAN	y07008.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270587 5' similar to contains element MER6 repetitive element;
5985	19079	32276	0.56	1.0E-03	AA773352.1	EST_HUMAN	ab65g12.s1 Stratagene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:345734 3'
6018	19101		0.52	1.0E-03	BF541639.1	EST_HUMAN	602088042F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4068807 5'
6136	19213		2.67	1.0E-03	X07699.1	NT	Mouse nucleolin gene
6177	19252	32485	1.06	1.0E-03	BE963939.2	EST_HUMAN	60165718R1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3875683 3'
6316	19387		8.39	1.0E-03	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6488	19633	32781	1.05	1.0E-03	T87791.1	EST_HUMAN	y883r1.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115772 5'
6549	19610		1.69	1.0E-03	AW902585.1	EST_HUMAN	QV3-NN1024-280400-171-g05 NN1024 Homo sapiens cDNA
6919	19970	33286	1.18	1.0E-03	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
7369	20329	33678	2.43	1.0E-03	D16826.1	NT	Human gene for fourth semaphorin receptor subtype
7728	20885		2.36	1.0E-03	AJ228042.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 2/3
7901	20844	34228	1.71	1.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase 1 (CAMK1), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
7975	20914	34305	3.18	1.0E-03	M63376.1	NT	Human TRPM-2 protein gene, exons 1,2 and 3
8033	20970	34384	0.87	1.0E-03	BE880044.1	EST_HUMAN	601491081F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3883276 5'
8221	21190	34598	0.55	1.0E-03	AF274581.1	NT	Homo sapiens prolactin-releasing peptide receptor gene, 5' flanking region
8282	21251	34663	5.32	1.0E-03	AJ251973.1	NT	Homo sapiens partial cecrin-1 gene
8483	21451	34889	1.01	1.0E-03	AA122270.1	EST_HUMAN	zh97c09.s1 Soares_pregnant_uterus_NblHPU Homo sapiens cDNA clone IMAGE:490788 3' similar to contains L1.1 L1 repetitive element;
8586	21554	34970	2.42	1.0E-03	AF153980.1	NT	Homo sapiens exostosin-like protein 1 (EXTL1) gene, exons 2 through 11, and complete cds
8773	21740	35161	0.7	1.0E-03	U28397.1	NT	Rattus norvegicus plasma membrane Ca2+ ATPase isoform 3 (PMCA3) gene, 5' flanking region
8941	21907	35331	0.53	1.0E-03	AA001613.1	EST_HUMAN	zh82a06.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:427810 3'
8941	21907	35332	0.53	1.0E-03	AA001613.1	EST_HUMAN	zh82a06.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:427810 3'
9295	22261		1.37	1.0E-03	Y11204.1	NT	V. carteri gene encoding photopsin
9321	22286	36716	0.8	1.0E-03	AW840353.1	EST_HUMAN	CM3-L10079-170200-092-607 L10079 Homo sapiens cDNA

Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9435	22399		0.65	1.0E-03	U62111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRT), CDM protein (CDM), adrenoleukodystrophy protein >
9474	22438	35877	3.71	1.0E-03	M30471.1	NT	Human class III alcohol dehydrogenase (ADH6) cbl subunit mRNA, complete cds
9474	22438	35878	3.71	1.0E-03	M30471.1	NT	Human class III alcohol dehydrogenase (ADH6) cbl subunit mRNA, complete cds
9855	22882		0.45	1.0E-03	A1247482.1	EST_HUMAN	q158d01.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1848673 3' similar to gblm97388 TATA-BINDING PROTEIN-ASSOCIATED PHOSPHOPROTEIN (HUMAN);
9888	22893	36354	1.77	1.0E-03	AF011400.1	NT	Thermotoga neapolitana alpha-1,6-galactosidase (aglA) gene, complete cds
9888	22893	36355	1.77	1.0E-03	AF011400.1	NT	Thermotoga neapolitana alpha-1,6-galactosidase (aglA) gene, complete cds
10179	23104	36585	0.8	1.0E-03	Q01129	SWISSPROT	BONE PROTEOGLYCAN II PRECURSOR (PG-S2) (DECORIN) (PG40) (DERMATAN SULFATE PROTEOGLYCAN-4) (DSPG)
10524	23446	36944	1.55	1.0E-03	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
10529	23451		0.79	1.0E-03	AF087485.1	NT	Homo sapiens transducin beta-like 2 (TBL2) gene, complete cds
10879	23801	37098	1.12	1.0E-03	AJ024350.1	EST_HUMAN	cr75f03.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1643175 3' similar to contains MER39.b1
11025	23990	37516	1.66	1.0E-03	AW362393.1	EST_HUMAN	RC1-CT0279-181099-011-e09 CT0279 Homo sapiens cDNA
11025	23990	37517	1.65	1.0E-03	AW362393.1	EST_HUMAN	RC1-CT0279-181099-011-e09 CT0279 Homo sapiens cDNA
11102	24082	37585	2.91	1.0E-03	BE170859.1	EST_HUMAN	QV3-HT0543-220300-130-e03 HT0543 Homo sapiens cDNA
11172	24129		2.21	1.0E-03	A158947.1	EST_HUMAN	ht3e12.x1 NCI_CGAP_HSC3 Homo sapiens cDNA clone IMAGE:2248446 3' similar to TR:Q28185 Q28185 PVA1 GENE.;
11491	24434		2.59	1.0E-03	AV758949.1	EST_HUMAN	AV758949 MDS Homo sapiens cDNA clone MDSDDF11 5'
11802	24598	38171	6.18	1.0E-03	AA122270.1	EST_HUMAN	z97c09.s1 Soares_pregnant_uterus_NhtHPU Homo sapiens cDNA clone IMAGE:480768 3' similar to contains L1.1 L1 repetitive element;
12178	25024	38821	6.74	1.0E-03	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12653	25915		1.53	1.0E-03	A347355.1	EST_HUMAN	1c05h11.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2063013 3' similar to contains Alu repetitive element;
12753	25936	31311	7.37	1.0E-03	BE780572.1	EST_HUMAN	601488878F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3972035 5'
5765	18857		1.78	9.0E-04	P06727	SWISSPROT	APOLIPOPROTEIN A-IV PRECURSOR (APO-AIV)
6388	18456		0.81	9.0E-04	AJ006945.1	NT	Homo sapiens KVLQ11 gene
6833	19691	32970	1.08	9.0E-04	P02381	SWISSPROT	MITOCHONDRIAL RIBOSOMAL PROTEIN VAR1
10001	22828		1.39	9.0E-04	AB037203.1	NT	Glycylrhiza glabra GgbsA1 mRNA for beta-amylin synthase, complete cds
1484	14517		1.04	8.0E-04	X98469.1	NT	Xlaevis mRNA for CASR protein
3839	16979	28894	0.64	8.0E-04	R07008.1	EST_HUMAN	yf12h10.f1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:126891 5'
4209	17238		4.49	8.0E-04	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4798	17815	30709	2.7	8.0E-04	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
11490	24423		2.01	8.0E-04	AA777084.1	EST_HUMAN	z24c10.s1 Soares_fetal_heart_NBH119W Homo sapiens cDNA clone IMAGE:377874 3'
11627	24565		2.02	8.0E-04	AI571089.1	EST_HUMAN	tr85a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2176310 3'
1844	14870	27868	1.17	7.0E-04	L41825.1	NT	Homo sapiens CYP17 gene, 5' and
2408	15415	28439	1.01	7.0E-04	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
2728	16720	28737	1.22	7.0E-04	AL163210.2	NT	Homo sapiens chromosome 21 segment HS27C010
3293	16346	28286	1.13	7.0E-04	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
6215	19289	32522	1.02	7.0E-04	AA516212.1	EST_HUMAN	ng85g12.s1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:839718 similar to contains L1.b3 L1 L1
6882	19719		2.3	7.0E-04	AI769331.1	EST_HUMAN	repetitive element:
7438	20405		0.78	7.0E-04	AK024445.1	NT	wg36709.x1 Soares_NSF_F8_gw_OT_PA_S1 Homo sapiens cDNA clone IMAGE:2367209 3'
10163	23088	36555	0.48	7.0E-04	P13497	SWISSPROT	Homo sapiens mRNA for FLJ00035 protein, partial cds
10163	23088	36556	0.48	7.0E-04	P13497	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
11882	24773		1.98	7.0E-04	U78027.1	NT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
11820	24801	38392	2.41	7.0E-04	Z40561.1	EST_HUMAN	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein
12921	25497		4.1	7.0E-04	R17336.1	EST_HUMAN	(L44L) and FTP3 (FTP3) genes, complete cds
12952	25527		3.97	7.0E-04	6005855	NT	HSC28A072 normalized infant brain cDNA Homo sapiens cDNA clone c-28a07 3'
2706	16701		1.03	8.0E-04	BF341380.1	EST_HUMAN	yg13c08.l1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:32288 5'
3684	17024	29635	1.78	8.0E-04	AI882525.1	EST_HUMAN	Homo sapiens Refine-derived POU-domain factor-1 (RPF-1), mRNA
4214	17243	30128	3.15	8.0E-04	U45983.1	NT	602013339F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4149297 5'
7830	20778	34158	0.69	8.0E-04	Q15034	SWISSPROT	wj16a11.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402876 3'
8198	21198		3.16	8.0E-04	P46408	SWISSPROT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
8349	21318		0.89	8.0E-04	H92947.1	EST_HUMAN	HYPOTHETICAL PROTEIN KIAA0032
10339	23263		3.98	8.0E-04	AI049507.2	EST_HUMAN	GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE (FRUCTOSE TRANSPORTER)
10440	23362	36852	2.19	8.0E-04	BE005850.1	EST_HUMAN	y04c11.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:231858 3' similar to contains LOR1 repetitive element;
10704	23628		0.65	8.0E-04	AF287478.1	NT	DKFZp586M2024.1 1 688 (synonym: huter1) Homo sapiens cDNA clone DKFZp586M2024
11814	24699	38280	2.11	8.0E-04	AI23042.1	NT	RC2-BN0120-250400-012-111 BN0120 Homo sapiens cDNA
11893	24774	38360	3.12	8.0E-04	AW013847.1	EST_HUMAN	Lycichinus variegatus embryonic blastocoele extracellular matrix protein precursor (ECM3) mRNA, complete cds
12364	25820		6.73	8.0E-04	AW380519.1	EST_HUMAN	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 2/3
652	13718	26640	8.71	5.0E-04	O10341	SWISSPROT	U-H-BIO-aab-e-08-0-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708825 3'
1501	14534		1.88	5.0E-04	AW851844.1	EST_HUMAN	RC1-HT0269-281199-012-408 HT0269 Homo sapiens cDNA
							HYPOTHETICAL 29.3 KD PROTEIN (ORF92)
							QV0-CT0225-021089-030-a07 CT0225 Homo sapiens cDNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3424	16472	29391	1.28	5.0E-04	AA548831.1	EST_HUMAN	nk27e1.1 s1 NCI_CGAP_Cor11 Homo sapiens cDNA clone IMAGE:1014784 3' similar to contains Alu repetitive element
3728	16770	29882	0.95	5.0E-04	Q8UKP4	SWISSPROT	ADAM-TS 7 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 7) (ADAMTS-7) (ADAM-TS7)
5549	18646	31588	2.37	5.0E-04	AF248054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
5784	19839	33124	5.04	5.0E-04	AA156080.1	EST_HUMAN	z333b08.t1 Stratiogene cdon (#837204) Homo sapiens cDNA clone IMAGE:588663 5'
7602	20563	33924	10.72	5.0E-04	M23604.1	NT	Gorilla gorilla involucrin gene medium allele, complete cds
8289	21258	34869	4.95	5.0E-04	AI188382.1	EST_HUMAN	q41306.x1 Soares_placenta_8to9weeks_2NtHP8b9W Homo sapiens cDNA clone IMAGE:1723619 3' similar to gb:X51602.cds1 VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPTOR 1 (HUMAN); contains Alu repetitive element
8646	21614	35036	0.92	5.0E-04	AA814519.1	EST_HUMAN	cd86e02.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1339228 3' similar to contains element MER22 repetitive element
9632	22576	36026	1.57	5.0E-04	AA846545.1	EST_HUMAN	af58f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1394357 3'
9726	22754	36207	0.62	5.0E-04	N83785.1	EST_HUMAN	KK2745F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone KK2745 5' similar to REPETITIVE ELEMENT
9876	22829	36283	0.64	5.0E-04	P29126	SWISSPROT	BIFUNCTIONAL ENDO-1,4-BETA-XYLANASE XYLA PRECURSOR
9988	22895	36358	4.55	5.0E-04	AW270898.1	EST_HUMAN	xs08e02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2768858 3'
10640	23562		0.47	5.0E-04	U60871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
11320	24270		1.94	5.0E-04	AL046507.2	EST_HUMAN	DKFZp586M2024.t1 586 (synonym: hute1) Homo sapiens cDNA clone DKFZp586M2024
12022	18646	31588	10.61	5.0E-04	AF248054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
12296	25753		4.4	5.0E-04	AA568513.1	EST_HUMAN	nf15h02.s1 NCI_CGAP_Prl Homo sapiens cDNA clone IMAGE:913875
674	13738	26685	1.46	4.0E-04	U32748.1	NT	Haemophilus influenzae Rd section 63 of 163 of the complete genome
848	13904	26862	1.6	4.0E-04	A1720263.1	EST_HUMAN	as70b08.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR:Q13825
848	13904	26863	1.6	4.0E-04	A1720263.1	EST_HUMAN	Q13825 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;
1461	14494	27468	2.76	4.0E-04	AW763366.1	EST_HUMAN	as70b08.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR:Q13825
2095	15112	28133	1.57	4.0E-04	AL163278.2	NT	Q13825 AU-BINDING PROTEIN/ENOYL-COA HYDRATASE. ;
2143	15160		0.99	4.0E-04	AL046704.1	EST_HUMAN	RC3-CT0254-130100-023-01 CT0254 Homo sapiens cDNA
2835	15634	28658	1.66	4.0E-04	O96615	SWISSPROT	Homo sapiens chromosome 21 segment HS21C078
3178	16233	29150	1.8	4.0E-04	AF281074.1	NT	DKFZp434D059.t1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D059 5'
							SERPIN-2 (SILK GUM PROTEIN 2)
							Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4351	17378	30257	3.23	4.0E-04	AA576331.1	EST_HUMAN	nh10a10.s1 NCI_CGAP_Co1 Homo sapiens cDNA clone IMAGE:561930 3' similar to gb:M21121 T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (HUMAN);
4351	17378	30258	3.23	4.0E-04	AA576331.1	EST_HUMAN	nh10a10.s1 NCI_CGAP_Co1 Homo sapiens cDNA clone IMAGE:561930 3' similar to gb:M21121 T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (HUMAN);
4588	17591	30484	1.4	4.0E-04	AA086324.1	EST_HUMAN	zn61c08.s1 Stratiene muscle 837208 Homo sapiens cDNA clone IMAGE:562670 3'
5124	18133	31010	4.37	4.0E-04	BE560680.1	EST_HUMAN	601345885F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3678910 5'
5288	18221		1.02	4.0E-04	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
7483	20449	33806	1.26	4.0E-04	P48442	SWISSPROT	EXTRACELLULAR CALCIUM-SENSING RECEPTOR PRECURSOR (CASR) (PARATHYROID CELL CALCIUM-SENSING RECEPTOR)
7780	20733		0.78	4.0E-04	AL161566.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 86
7887	20826	34321	0.56	4.0E-04	AU122078.1	EST_HUMAN	AU122078 MAMMA1 Homo sapiens cDNA clone MAMMA1001620 5'
8881	21848	35289	1.07	4.0E-04	BF240712.1	EST_HUMAN	601875985F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4089700 5'
8888	21855	35276	1.56	4.0E-04	N25507.1	EST_HUMAN	y33612.r1 Soares melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:264142 5'
10049	22976	36442	3.11	4.0E-04	AD25689.1	EST_HUMAN	ov67h03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1644341 3'
10200	23125		1.11	4.0E-04	AF022855.1	NT	Mus musculus neuroligin-2(al7) mRNA, alternatively spliced, complete cds
12664	25729		2.42	4.0E-04	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
157	13260	26187	3.45	3.0E-04	AL119426.1	EST_HUMAN	DKFZp781J221_r1 761 (synonym: hary2) Homo sapiens cDNA clone DKFZp781J221 5'
197	13298	26226	1.65	3.0E-04	P49289	SWISSPROT	180 KD SECRETORY PHOSPHOLIPASE A2 RECEPTOR PRECURSOR (PLA2-R)
881	13636	26395	1.64	3.0E-04	U83991.1	NT	Human short chain acyl CoA dehydrogenase gene, exons 1 and 2
1856	14682	27878	1.65	3.0E-04	A282100.1	EST_HUMAN	q228d03.y1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2028187 5'
1871	14688	28291	1.43	3.0E-04	A388674.1	EST_HUMAN	ht23a02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2118082 3'
3319	16371	28291	3.17	3.0E-04	P25147	SWISSPROT	INTERNALIN B PRECURSOR
3987	17027	29338	2.72	3.0E-04	P49448	SWISSPROT	GLUTAMATE DEHYDROGENASE 2 PRECURSOR (GDH)
4086	17120		1.21	3.0E-04	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
4120	17153		1.33	3.0E-04	BE140608.1	EST_HUMAN	RCO-HT0014-310599-028 HT0014 Homo sapiens cDNA
4654	17871		6.29	3.0E-04	BE163778.1	EST_HUMAN	PM0-HT0339-190200-007-g12 HT0339 Homo sapiens cDNA
5248	18258		1.02	3.0E-04	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
6266	19339		5.73	3.0E-04	AL163261.2	NT	Homo sapiens chromosome 21 segment HS21C081
6933	20119	33432	1.62	3.0E-04	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
7163	18414	31216	0.71	3.0E-04	AW893981.1	EST_HUMAN	RC4-NN0027-060400-011-508 NN0027 Homo sapiens cDNA
7847	20794	34171	0.77	3.0E-04	P23468	SWISSPROT	PROTEIN-TYROSINE PHOSPHATASE DELTA PRECURSOR (R-PTP-DELTA)
8602	21670	34986	5.18	3.0E-04	P22807	SWISSPROT	FIBROBLAST GROWTH FACTOR RECEPTOR 3 PRECURSOR (FGFR-3)
10280	23205	36689	1.44	3.0E-04	AA454055.1	EST_HUMAN	zz48d08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:795471 5' similar to gb:M62762 VACUOLAR ATP SYNTHASE 16 KD PROTEOLIPID SUBUNIT (HUMAN);

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10538	23460	36957	0.58	3.0E-04	AI802130.1	EST_HUMAN	wf75d11.x1 Soares thymus_NHT_Homo sapiens cDNA clone IMAGE:2513276 3'
10825	23746	37247	7.72	3.0E-04	AA781201.1	EST_HUMAN	q24g05.s1 Soares testis_NHT_Homo sapiens cDNA clone 1391288 3' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);
12246	26967	31316	3.98	3.0E-04	AA228301.1	EST_HUMAN	nc38a04.r1 NC1_CGAP_P2_Homo sapiens cDNA clone IMAGE:1010430 similar to contains L1.12 L1 repetitive element;
12823	25802	31525	5.33	3.0E-04	AB018282.1	NT	Homo sapiens mRNA for KIAA0749 protein, partial cds
13014	25584		4.33	3.0E-04	AL134483.1	EST_HUMAN	DKF7p547L185_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKF7p547L185 5'
177	13278	26204	1.29	2.0E-04	AF217786.1	NT	Homo sapiens SCG10 like-protein, helicase-like protein NHL_M88, and ADP-ribosylation factor related protein 1 (ARFRP1) genes, complete cds
479	13551	28479	3.55	2.0E-04	AU146707.1	EST_HUMAN	AU146707 HEMBB1 Homo sapiens cDNA clone HEMBB1001253 3'
808	13983	28919	4.01	2.0E-04	MB8624.1	NT	Human dystrophin gene
808	13983	28920	4.01	2.0E-04	MB8624.1	NT	Human dystrophin gene
1183	14224		2.52	2.0E-04	A1286021.1	EST_HUMAN	qf88a11.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1855052 3' similar to contains MER3.s2 MER3 repetitive element;
1180	14230		2.5	2.0E-04	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1849	14875		1.19	2.0E-04	AF224268.1	NT	Mus musculus 5' flanking region of P11x3 gene
2194	15209		1.03	2.0E-04	AA478880.1	EST_HUMAN	zu38a05.s1 Soares ovary tumor N6HOT Homo sapiens cDNA clone IMAGE:740337 3' similar to contains Alu repetitive element;
2581	15582	28601	4.05	2.0E-04	U66061.1	NT	Human gamine T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV19S1P, TCRBV15S1, TCRBV11S1A1T, HVB refo, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBJ1S1, TCRBJ1S2>
3000	16058	28977	1.13	2.0E-04	AI124528.1	EST_HUMAN	am58a09.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1639760 3'
3449	18498	29413	2.44	2.0E-04	BE082317.1	EST_HUMAN	QV2-BT0838-070500-194-b07 BT0838 Homo sapiens cDNA
3932	16972	28888	1.21	2.0E-04	AW978441.1	EST_HUMAN	EST390550 IMAGE resequences, MAGP Homo sapiens cDNA
4187	17198		5.41	2.0E-04	U01029.1	NT	Phaeodius vulgaris nitrate reductase (PVNR2) gene, complete cds
4696	17717	30612	1.21	2.0E-04	H86285.1	EST_HUMAN	y01e11.r1 Soares pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:232568 5'
4696	17717	30613	1.21	2.0E-04	H86285.1	EST_HUMAN	y01e11.r1 Soares pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:232568 5'
4834	17851		1.46	2.0E-04	U06226.1	NT	Gallus gallus professor 28 kDa subunit homolog mRNA, complete cds
5070	18080	30961	1.21	2.0E-04	H85683.1	EST_HUMAN	ys68b08.r1 Soares retina N2b4-IR Homo sapiens cDNA clone IMAGE:219627 5' similar to contains L1 repetitive element;
5096	18108	30961	1.85	2.0E-04	AB037897.1	NT	Danio rerio hagarano gene, exons 1 to 6, partial cds
5823	18719	31878	1.23	2.0E-04	AV654352.1	EST_HUMAN	AV654352 GLC Homo sapiens cDNA clone GLCDU10 3'
5836	18732	31894	1.78	2.0E-04	AI690802.1	EST_HUMAN	tc03b11.x1 NC1_CGAP_U12 Homo sapiens cDNA clone IMAGE:2207709 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5843	18933	32117	1.15	2.0E-04	AA286652.1	EST_HUMAN	EST11181 Uterus Homo sapiens cDNA 5' end similar to EST containing O family repeat
6057	19138	32349	0.88	2.0E-04	4758179	NT	Homo sapiens cell cycle progression 3 protein (DNJ3) mRNA
6368	19435	32878	0.8	2.0E-04	AF140708.1	NT	Mus musculus G protein coupled receptor gene, complete cds; and unknown gene
7440	20407		2.54	2.0E-04	AU121712.1	EST_HUMAN	AU121712 MAMMA1 Homo sapiens cDNA clone MAMMA1000788 5'
7546	20509		0.61	2.0E-04	AW680963.1	EST_HUMAN	QV0-CT0387-180300-187-410 CT0387 Homo sapiens cDNA
7882	20826		15.1	2.0E-04	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7892	20835	34216	1.21	2.0E-04	P54298	SWISSPROT	MYOMESIN 2 (M-PROTEIN) (165 KD TITIN-ASSOCIATED PROTEIN) (165 KD CONNECTIN-ASSOCIATED PROTEIN)
8170	21109	34508	0.53	2.0E-04	AL043272.2	EST_HUMAN	DKFZp434L2023_r1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L2023 5'
8170	21109	34509	0.53	2.0E-04	AL043272.2	EST_HUMAN	DKFZp434L2023_r1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L2023 5'
8288	21257	34687	2.13	2.0E-04	U32444.2	NT	Solanum lycopersicum phytochrome F (PHYF) gene, partial cds
8288	21257	34688	2.13	2.0E-04	U32444.2	NT	Solanum lycopersicum phytochrome F (PHYF) gene, partial cds
8627	21595	35015	1.21	2.0E-04	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8627	21595	35016	1.21	2.0E-04	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8911	21877	35303	1.9	2.0E-04	AF026503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
9095	22061	35480	0.56	2.0E-04	X57331.1	NT	Human immunoglobulin C(mu) and C(delta) heavy chain genes (constant regions)
9689	22842	36100	0.51	2.0E-04	AA725700.1	EST_HUMAN	at22a12.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343516 3'
9774	22715	36170	0.65	2.0E-04	P18715	SWISSPROT	GASTRULA ZINC FINGER PROTEIN XLOGF28.1
10334	23238	36735	1.21	2.0E-04	BE149303.1	EST_HUMAN	RC3-HT0254-151050-011-b05 HT0254 Homo sapiens cDNA
10377	23300	36776	2.74	2.0E-04	AA405777.1	EST_HUMAN	zu68c1.1.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:742884 5'
11187	24152	37683	3.68	2.0E-04	AV730373.1	EST_HUMAN	AV730373 HTF Homo sapiens cDNA clone HTFAAA01 5'
11510	24451		2.59	2.0E-04	AJ243213.1	NT	Homo sapiens partial 6-HT4 receptor gene, exons 2 to 5
11695	24672	38138	2.95	2.0E-04	AJ440282.1	EST_HUMAN	W01f11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140269 3' similar to contains Alu repetitive element
11755	24683	38282	2.49	2.0E-04	AW136740.1	EST_HUMAN	UHH-B11-edm-o-04-0-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717180 3'
768	13827	26771	0.81	1.0E-04	H99848.1	EST_HUMAN	y28c09.s1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:262884 3' similar to contains L1.1 L1 repetitive element
951	14004	26958	2.03	1.0E-04	P48725	SWISSPROT	PERICENTRIN
1076	14121	27072	2.61	1.0E-04	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPYRIMIDINIC ACID POLYPYRIMIDINIC ACID POLYPYRIMIDINIC ACID POLYPYRIMIDINIC ACID
1116	14160	27110	4.21	1.0E-04	AW013847.1	EST_HUMAN	ENDONUCLEASE
							UHH-B10-eab-o-09-0-UJ.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708825 3'

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1116	14160	27111	4.21	1.0E-04	AW013847.1	EST_HUMAN	UH-HB10-emb-e-09-0-UI.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708825 3'
1335	14368		3.08	1.0E-04	U62918.1	NT	Anguilla anguilla dopamine D1A1 receptor (d1A1) gene, complete cds
1632	14685	27640	3.19	1.0E-04	AF148805.1	NT	Kaposi's sarcoma-associated herpesvirus ORF 88 gene, partial cds; and ORF 89, kaposin, v-FLIP, v-cyclin, latent nuclear antigen, ORF K14, v-GPCR, putative phosphoribosylformylglycinamide synthase, and LAMP (LAMP) genes, complete cds
1632	14685	27640	3.19	1.0E-04	AF148805.1	NT	Kaposi's sarcoma-associated herpesvirus ORF 88 gene, partial cds; and ORF 89, kaposin, v-FLIP, v-cyclin, latent nuclear antigen, ORF K14, v-GPCR, putative phosphoribosylformylglycinamide synthase, and LAMP (LAMP) genes, complete cds
1632	14685	27641	3.19	1.0E-04	AF148805.1	NT	Kaposi's sarcoma-associated herpesvirus ORF 88 gene, partial cds; and ORF 89, kaposin, v-FLIP, v-cyclin, latent nuclear antigen, ORF K14, v-GPCR, putative phosphoribosylformylglycinamide synthase, and LAMP (LAMP) genes, complete cds
1878	14803	27903	2.37	1.0E-04	AB048342.1	NT	Equus caballus DNA, chromosome 24q14, microsatellite TKY36
2698	15694	28710	1.05	1.0E-04	BE218833.1	EST_HUMAN	hm45c08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3176368 3'
2698	15694	28711	1.05	1.0E-04	BE218833.1	EST_HUMAN	hm45c08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3176368 3'
3287	16350	28270	1.14	1.0E-04	Q62203	SWISSPROT	SPICEOSOME ASSOCIATED PROTEIN 62 (SAP 62) (SPLICING FACTOR 3A SUBUNIT 2) (SF3A68)
3748	16780	29702	0.83	1.0E-04	A440282.1	EST_HUMAN	p01f11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140269 3' similar to contains Alu repetitive element
4089	17123	30017	2.07	1.0E-04	M14042.1	NT	Mouse alpha 1 type-IV collagen mRNA
4109	17143	30037	1.04	1.0E-04	AV647727.1	EST_HUMAN	AV647727 GLC Homo sapiens cDNA clone GLCBBD04 3'
5132	18141	31020	1.87	1.0E-04	7682015	NT	Homo sapiens KIAA0237 gene product (KIAA0237), mRNA
5132	18141	31020	1.87	1.0E-04	7682015	NT	Homo sapiens KIAA0237 gene product (KIAA0237), mRNA
5137	18146	31028	0.82	1.0E-04	A357168.1	EST_HUMAN	q62h04.x1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:2005975 3'
5880	19045	32244	1.19	1.0E-04	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
6033	19116	32319	0.52	1.0E-04	T19815.1	EST_HUMAN	763F Heart Homo sapiens cDNA clone 753
6033	19118	32320	0.52	1.0E-04	T19815.1	EST_HUMAN	763F Heart Homo sapiens cDNA clone 753
6578	19639	32805	0.9	1.0E-04	AA177111.1	EST_HUMAN	nc02er12.s1 NCI_CGAP_P18 Homo sapiens cDNA clone IMAGE:262
7012	20138	33455	0.68	1.0E-04	AA694561.1	EST_HUMAN	rt25e04.s1 NCI_CGAP_AA1 Homo sapiens cDNA clone IMAGE:983486 3' similar to gcl487262
7392	20361	33713	12.88	1.0E-04	A251980.1	EST_HUMAN	KALLMANN SYNDROME PROTEIN PRECURSOR (HUMAN) contains Alu repetitive element
7821	20361	33713	12.73	1.0E-04	A251980.1	EST_HUMAN	q67d10.x1 NCI_CGAP_Ox32 Homo sapiens cDNA clone IMAGE:1985683 3'
8328	21297	34712	0.89	1.0E-04	AA630483.1	EST_HUMAN	q57d10.x1 NCI_CGAP_Ox32 Homo sapiens cDNA clone IMAGE:1985683 3'
8682	22845	36102	2.18	1.0E-04	A806220.1	EST_HUMAN	ab04q08.s1 Stratogene lung (8637210) Homo sapiens cDNA clone IMAGE:854654 3'
8703	22656	36111	1.47	1.0E-04	O89969	SWISSPROT	wf28e08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356742 3'
9780	22721		0.63	1.0E-04	T77163.1	EST_HUMAN	CYSTATIN-RELATED EPIDIDYMAL SPERMATOGENIC PROTEIN PRECURSOR (CYSTATIN 8)
10004	22931	36394	1.89	1.0E-04	10863876	NT	y472c08.t1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:113774 5'
10339	23461		9.91	1.0E-04	P08547	SWISSPROT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
10576	23498	36590	0.91	1.0E-04	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11687	24603		1.74	1.0E-04	M28587.1	NT	Mouse alpha leukocyte interferon gene, complete cds
11681	24840	38433	1.5	1.0E-04	AB032868.1	NT	Homo sapiens mRNA for KIAA1142 protein, partial cds
11689	24876	38472	1.46	1.0E-04	AW289061.1	EST_HUMAN	xx49g12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2816518 3'
12032	24908	38502	1.81	1.0E-04	Q03698	SWISSPROT	NEURONAL-GLIAL CELL ADHESION MOLECULE PRECURSOR (NG-CAM)
12032	24908	38503	1.81	1.0E-04	Q03698	SWISSPROT	NEURONAL-GLIAL CELL ADHESION MOLECULE PRECURSOR (NG-CAM)
12413	25770		2.4	1.0E-04	BE676389.1	EST_HUMAN	722a10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3296058 3' similar to contains L1.3 L1 repetitive element:
13061	25697		1.38	1.0E-04	BE700353.1	EST_HUMAN	PM4-NN0091-190700-004-F11 NN0091 Homo sapiens cDNA
689	13761	28683	2.39	9.0E-05	AA718933.1	EST_HUMAN	ab45c11.s1 Soares_testis_NHT Homo sapiens cDNA clone 1282468 3'
2020	15041	28052	1.09	9.0E-05	AW866218.1	EST_HUMAN	QV4-SN0023-070400-169-604 SN0023 Homo sapiens cDNA
6074	19155	32387	1.58	9.0E-05	Q60716	SWISSPROT	PROLYL 4-HYDROXYLASE ALPHA-2 SUBUNIT PRECURSOR
7828	20776	34153	0.67	9.0E-05	AW204958.1	EST_HUMAN	UH-B11-ear-d-05-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720289 3'
7828	20776	34154	0.67	9.0E-05	AW204958.1	EST_HUMAN	UH-B11-ear-d-05-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720289 3'
8631	22680		2.89	9.0E-05	D85606.1	NT	Homo sapiens gene for cholesterylkinin type-A receptor, complete cds
8633	22682	36137	3.13	9.0E-05	AF120822.1	NT	Homo sapiens methyl-CpG binding protein 1 (MBD1) gene, exon 15b
11472	24415	37864	2.03	9.0E-05	AW073078.1	EST_HUMAN	xx34g05.x1 NCI_CGAP_B18 Homo sapiens cDNA clone IMAGE:2588728 3' similar to contains L1.2 L1 repetitive element:
11938	19155	32367	3.21	9.0E-05	Q60716	SWISSPROT	PROLYL 4-HYDROXYLASE ALPHA-2 SUBUNIT PRECURSOR
12485	25832		3.02	9.0E-05	AF129768.1	NT	Homo sapiens MSH55 gene, partial cds; and CLIC1, DDAH, G6b, G6c, G6d, G6e, G6f, BAT5, G5b, CSK2B, BAT4, G4, Apo M, BAT3, BAT2, AIF-1, 1C7, LST-1, LTB, TNF, and LTA genes, complete cds
822	13880	26831	1.79	8.0E-05	AJ251646.1	NT	Pisum sativum mRNA for beta-1,3 glucanase (grn2 gene)
865	13921		7.38	8.0E-05	AJ251646.1	NT	Pisum sativum mRNA for beta-1,3 glucanase (grn2 gene)
2061	16019		0.91	8.0E-05	M83575.1	NT	Human platelet-derived growth factor A chain (PDGFA) gene, exons only
4507	17532	30415	0.87	8.0E-05	AW044605.1	EST_HUMAN	wy78a04.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2554638 3'
9101	22067	35483	0.48	8.0E-05	Y11686.1	NT	Mus musculus gene for hexokinase II, exon 1 (and joined CDS)
11485	24428	37979	3.06	8.0E-05	M89187.1	NT	Human heptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds
13050	28815		2.74	8.0E-05	AA278333.1	EST_HUMAN	zs88a01.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:704583 3' similar to contains Alu repetitive element; contains element MSR1 repetitive element:
347	13436	26358	6.11	7.0E-05	AW847445.1	EST_HUMAN	RC3-CT0208-220989-011-E04 CT0208 Homo sapiens cDNA
347	13436	26359	6.11	7.0E-05	AW847445.1	EST_HUMAN	RC3-CT0208-220989-011-E04 CT0208 Homo sapiens cDNA
509	13639	26553	1	7.0E-05	L49075.1	EST_HUMAN	HUM072014F Human fovea cDNA Homo sapiens cDNA clone EST HFD072014
509	13639	26554	1	7.0E-05	L49075.1	EST_HUMAN	HUM072014F Human fovea cDNA Homo sapiens cDNA clone EST HFD072014

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1058	14104	27055	1.47	7.0E-05	Q22949	SWISSPROT	PROBABLE GLYCEROL-3-PHOSPHATE ACYLTRANSFERASE, MITOCHONDRIAL PRECURSOR (GPAT)
2730	15724	28740	4.28	7.0E-05	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
3172	16227	29143	4.21	7.0E-05	AB009080.1	NT	Dictyostelium discoideum gene for TRFA, complete cds
3714	16767		0.9	7.0E-05	AI432413.1	EST_HUMAN	U73c09.x1 Soares_NhlhMPu_S1 Homo sapiens cDNA clone IMAGE:2114416 3'
4400	17428	30313	1.53	7.0E-05	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4982	17977	30867	0.69	7.0E-05	8845300	NT	Rat cytomegalovirus Maestricht, complete genome
8667	21636	34965	1.27	7.0E-05	AA505582.1	EST_HUMAN	nt83g01.s1 NCL_CGAP_Br2 Homo sapiens cDNA clone IMAGE:968096 3'
8911	22732	36187	3.34	7.0E-05	T07095.1	EST_HUMAN	EST04084 Fetal brain, Strategene (cat#838206) Homo sapiens cDNA clone HFBED60
10882	23802	37415	0.44	7.0E-05	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
10882	23802	37416	0.44	7.0E-05	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
11495	24438		9	7.0E-05	10835046	NT	Homo sapiens chromosome 21 segment HS21C049
2041	15060	28080	1.0	6.0E-05	4885170	NT	Homo sapiens sarcoglycan, epsilon (SGCE), mRNA
2041	15060	28081	1.0	6.0E-05	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
2594	15995	28613	1.05	6.0E-05	AI655241.1	EST_HUMAN	nt54h08.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2308531 3' similar to gb:J03250 DNA TOPOISOMERASE I (HUMAN);
2694	15990	28707	1.3	6.0E-05	Z94508.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC9pA28B10
2694	15990	28708	1.3	6.0E-05	Z94508.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC9pA28B10
2825	13743	28689	3.23	6.0E-05	AF053630.1	NT	Homo sapiens monocyte/neutrophil elastase inhibitor gene, complete cds
5107	18117	30890	0.93	6.0E-05	AV722942.1	EST_HUMAN	AV722942 HTB Homo sapiens cDNA clone HTBED12 5'
5107	18117	30891	0.93	6.0E-05	AV722942.1	EST_HUMAN	AV722942 HTB Homo sapiens cDNA clone HTBED12 5'
6019	19102	32303	3.06	6.0E-05	Q12860	SWISSPROT	CONTACTIN PRECURSOR (GLYCOPROTEIN GP135)
6019	19102	32304	3.06	6.0E-05	Q12860	SWISSPROT	CONTACTIN PRECURSOR (GLYCOPROTEIN GP135)
6543	19805	32867	1.45	6.0E-05	N72829.1	EST_HUMAN	yf0g11.1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:246212 5'
7119	20053	33357	0.77	6.0E-05	AA897680.1	EST_HUMAN	q80a03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1504598 3'
8421	21390	34800	0.71	6.0E-05	BE064410.1	EST_HUMAN	RC4-BT0311-141189-011-p08 BT0311 Homo sapiens cDNA
8421	21390	34801	0.71	6.0E-05	BE064410.1	EST_HUMAN	RC4-BT0311-141189-011-p08 BT0311 Homo sapiens cDNA
8786	21753	35175	0.68	6.0E-05	AA150482.1	EST_HUMAN	z08c08.s1 Soares_pregnant_uterus_NhlhPU Homo sapiens cDNA clone IMAGE:491728 3' similar to contains element MER28 repetitive element;
8791	21758	35180	2.37	6.0E-05	AW896326.1	EST_HUMAN	PM4-NN0050-310300-001-410 NN0050 Homo sapiens cDNA
8927	21893	35321	0.61	6.0E-05	Q80401	SWISSPROT	COMPLEMENT DECAY-ACCELERATING FACTOR PRECURSOR
9607	22611	36063	1.11	6.0E-05	P08607	SWISSPROT	C4B-BINDING PROTEIN PRECURSOR (C4BP)
9607	22611	36064	1.11	6.0E-05	P08607	SWISSPROT	C4B-BINDING PROTEIN PRECURSOR (C4BP)
9879	22832	36286	1.05	6.0E-05	T94149.1	EST_HUMAN	y528c12.1 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:119082 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10078	23008	36477	0.71	6.0E-05	AW627985.1	EST_HUMAN	h37a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2874444 3'
11100	24080	37684	2.27	6.0E-05	R75639.1	EST_HUMAN	y59408.s1 Soares placenta Nk2H1P Homo sapiens cDNA clone IMAGE:143635 3' similar to contains Alu repetitive element; contains LTR7 repetitive element;
11847	24730	38316	2.71	6.0E-05	AA044015.1	EST_HUMAN	z68802.J1 Soares_pregnant_uterus_NH1PU Homo sapiens cDNA clone IMAGE:487035 5'
12670	25813	31529	16.08	6.0E-05	AW890110.1	EST_HUMAN	MFO-NT0038-250400-001-009 NT0038 Homo sapiens cDNA
1403	14438	27404	16.34	5.0E-05	AW382086.1	EST_HUMAN	QV4-ST0234-241189-040-h11 ST0234 Homo sapiens cDNA
1880	14905		1.15	5.0E-05	8823891	NT	Homo sapiens 22kDa peroxisomal membrane protein-like (LOC55895), mRNA
4004	17043	29651	3.54	5.0E-05	AJ251884.1	NT	Homo sapiens partial SLC22A3 gene for extraneuronal monoamine transporter (EMT), exon 1
5803	18699	31670	11.74	5.0E-05	X58855.1	NT	Human MLC1 gene for embryonic myosin alkaline light chain, 3'UTR
6107	18186	32405	3.22	5.0E-05	AV653544.1	EST_HUMAN	AV653544 GLO Homo sapiens cDNA clone GLCMA06 3'
6292	18384	32603	0.84	5.0E-05	AF20225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
7553	20516		1.18	5.0E-05	AB037064.1	NT	Mus musculus gene for calretinin, exon 1
12462	25371		5.88	5.0E-05	P49183	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
12717	25371		4.8	5.0E-05	P49183	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
2818	13329		4.95	4.0E-05	U12821.1	NT	Human renin (REN) gene, 5' flanking region
4508	17633	30416	1.68	4.0E-05	P49183	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
4508	17633	30417	1.68	4.0E-05	P49183	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
4910	17827		0.99	4.0E-05	AF184488.1	NT	Cryptosporidium parvum isolate Zaire 15 kDa glycoprotein gp15 gene, partial cds
7127	20060	33368	0.71	4.0E-05	U01947.1	NT	Macaca mulatta haptoglobin (HP) gene, 5' region
8881	22834		8.43	4.0E-05	AF202835.1	NT	Homo sapiens PP1200 mRNA, complete cds
							RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE;
10360	23283	36760	0.51	4.0E-05	P11369	SWISSPROT	ENDONUCLEASE]
10771	23692	37189	0.66	4.0E-05	P23780	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE) (ACID BETA-GALACTOSIDASE)
							h36cd07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2874380 3' similar to contains element MIR repetitive element;
11120	24080	37684	3.91	4.0E-05	AW627946.1	EST_HUMAN	h36cd09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2605192 3'
12423	25182		2.46	4.0E-05	AW117580.1	EST_HUMAN	z611e11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:746252 3'
13081	25612		2.29	4.0E-05	AA417758.1	EST_HUMAN	qf84c10.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849488 3' similar to contains Alu repetitive element; contains element KER repetitive element;
681	13744	26871	0.78	3.0E-05	AP248061.1	EST_HUMAN	h36cd09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2814100 3'
1081	14107	27057	1.89	3.0E-05	AW273851.1	EST_HUMAN	601461463F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865142 5'
1133	14176	27125	0.82	3.0E-05	BF037898.1	EST_HUMAN	601461463F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865142 5'
1133	14176	27126	0.82	3.0E-05	BF037898.1	EST_HUMAN	601461463F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865142 5'
4409	17437	30324	8.15	3.0E-05	BE169211.1	EST_HUMAN	PM1-HT0521-120200-001-e10 HT0521 Homo sapiens cDNA
4409	17437	30325	8.15	3.0E-05	BE169211.1	EST_HUMAN	PM1-HT0521-120200-001-e10 HT0521 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4493	17518	30405	2.41	3.0E-05	AA388678.1	EST_HUMAN	EST79898 Placenta 1 Homo sapiens cDNA similar to p53-associated protein
4493	17518	30406	2.41	3.0E-05	AA388678.1	EST_HUMAN	EST79898 Placenta 1 Homo sapiens cDNA similar to p53-associated protein
4620	17841		0.7	3.0E-05	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
5037	18733	31895	1.76	3.0E-05	11072102	NT	Mus musculus myosin light chain 2, precursor lymphocyte-specific (Myh2cp), mRNA
6021	18971	33287	1.18	3.0E-05	AJ225782.1	NT	Homo sapiens SYBL1 gene, exons 6-8
6021	18971	33288	1.18	3.0E-05	AJ225782.1	NT	Homo sapiens SYBL1 gene, exons 6-8
8230	21189	34806	2.46	3.0E-05	BE733157.1	EST_HUMAN	601687451F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842282 5'
8095	21663	35087	1.68	3.0E-05	AA284049.1	EST_HUMAN	zs60b05.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:3009838 3'
9244	22210	35841	1.54	3.0E-05	AW770982.1	EST_HUMAN	h94408.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3009838 3'
9248	22214	35844	1.37	3.0E-05	6912431	NT	Homo sapiens Interleukin-1 receptor antagonist homolog 1 (IL1HY1), mRNA
9252	22218	35949	0.59	3.0E-05	P43361	SWISSPROT	MELANOMA-ASSOCIATED ANTIGEN 8 (MAGE-8 ANTIGEN)
9486	22450		0.51	3.0E-05	X03273.1	NT	Human Alu-family cluster 5' of alpha(1)-acid glycoprotein gene
9675	22628	36081	1.2	3.0E-05	AA372582.1	EST_HUMAN	EST84476 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
10021	22948		3.24	3.0E-05	AJ768331.1	EST_HUMAN	wg36f09.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2367208 3'
10901	23821	37330	0.89	3.0E-05	Q62918	SWISSPROT	PROTEIN KINASE C-BINDING PROTEIN NELL2 PRECURSOR (NELL-LIKE PROTEIN 2)
10901	23821	37331	0.89	3.0E-05	Q62918	SWISSPROT	PROTEIN KINASE C-BINDING PROTEIN NELL2 PRECURSOR (NELL-LIKE PROTEIN 2)
12353	25147		1.49	3.0E-05	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
2332	15343	28365	1.32	2.0E-05	AI286021.1	EST_HUMAN	qf88e11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1855052 3' similar to contains
2367	15598	28605	2.2	2.0E-05	M19782.1	NT	MER3 b2 MER3 repetitive element;
2725	16719		7.98	2.0E-05	AA180582.1	EST_HUMAN	Human adenosine deaminase (ADA) gene, complete cds
3154	18211	28126	1.15	2.0E-05	BE086038.1	EST_HUMAN	zq48a12.r1 Stratagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632734 5' similar to contains Alu repetitive element; contains element L1 repetitive element;
3359	18409	28331	0.88	2.0E-05	AF184614.1	NT	RC3-BT0319-120200-014-H08 BT0319 Homo sapiens cDNA
3382	18431	28359	1.36	2.0E-05	X89211.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
3905	18562		0.7	2.0E-05	X89465.1	NT	H. sapiens DNA for endogenous retroviral like element
3920	18680		0.69	2.0E-05	AL039107.1	EST_HUMAN	S.cerevisiae 12.8 Kbp fragment of the left arm of chromosome XV
4720	17740		1	2.0E-05	BE378471.1	EST_HUMAN	DKFZp5680084_J1 568 (synonym: hfkad2) Homo sapiens cDNA clone DKFZp5680084 5'
5852	18943	32128	1.57	2.0E-05	AJ011712.1	NT	601236455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608653 5'
6024	19107		0.65	2.0E-05	AF028308.1	NT	Homo sapiens TNNT1 gene, exons 1-11 (and joined CDS)
6082	19162	32373	0.86	2.0E-05	Q13183	SWISSPROT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families RENAL SODIUM/DICARBOXYLATE COTRANSPORTER (NA(+)/DICARBOXYLATE COTRANSPORTER)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6082	19182	32374	0.88	2.0E-05	Q13183	SWISSPROT	RENAL SODIUM/DICARBOXYLATE COTRANSPORTER (NA ⁺ /DICARBOXYLATE COTRANSPORTER)
6281	19353	32589	0.88	2.0E-05	A1149272.1	EST_HUMAN	qc72a02.x1 Soares_placenta_8to9weeks_2NkHP8to9W Homo sapiens cDNA clone IMAGE:1715114.3'
6356	19425	32687	0.49	2.0E-05	P35085	SWISSPROT	similar to contains L1.13 L1 repetitive element;
6778	19833	33116	2.32	2.0E-05	AA714330.1	EST_HUMAN	CALCIUM-BINDING PROTEIN
7096	20020	33322	1.52	2.0E-05	Y08928.1	NT	nw08d12.s1 NCI_OGAP_S51 Homo sapiens cDNA clone IMAGE:1238519.3'
7098	20033	33338	0.94	2.0E-05	A1492960.1	EST_HUMAN	P.falcipterus mRNA for AARP1 protein, partial
7108	20042		8.62	2.0E-05	A1891026.1	EST_HUMAN	qc47h08.x1 NCI_OGAP_Kd11 Homo sapiens cDNA clone IMAGE:2030003.3' similar to TR:002711
7360	20330	33679	2.22	2.0E-05	AF224282.1	NT	Q02711 PRO-POL-DUTPASE POLYPROTEIN;
7360	20330	33680	2.22	2.0E-05	AF224282.1	NT	wu35h07.x1 Soares_Dieckgrafe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2522077.3'
7592	20553		0.81	2.0E-05	AF128947.1	NT	Heterodontus francisci HoxA10 (HoxA10), HoxA9 (HoxA9), HoxA7 (HoxA7), HoxA6 (HoxA6), HoxA5 (HoxA5), HoxA4 (HoxA4), HoxA3 (HoxA3), HoxA2 (HoxA2), and HoxA1 (HoxA1) genes, complete cds
8157	21095	34494	0.5	2.0E-05	U60061.1	NT	Heterodontus francisci HoxA10 (HoxA10), HoxA9 (HoxA9), HoxA7 (HoxA7), HoxA6 (HoxA6), HoxA5 (HoxA5), HoxA4 (HoxA4), HoxA3 (HoxA3), HoxA2 (HoxA2), and HoxA1 (HoxA1) genes, complete cds
8217	21186	34598	1.25	2.0E-05	A1381040.1	EST_HUMAN	Homo sapiens Indolethylamine N-methyltransferase (INMT) mRNA, INMT-2 allele, complete cds
9477	22441	36881	0.52	2.0E-05	BE244840.1	EST_HUMAN	Human gamma T-cell receptor beta chain TCREV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV16S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY6, TRY8, TRY7, TRY8, TCRBD1, TCRBJ1S1, TCRBJ1S2>
9477	22441	36882	0.52	2.0E-05	BE244840.1	EST_HUMAN	tc2h05.x1 NCI_OGAP_CL11 Homo sapiens cDNA clone IMAGE:2108389.3'
9622	22568	36015	0.57	2.0E-05	P49457	SWISSPROT	TCBAP2E1500 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP1890
9622	22568	36016	0.57	2.0E-05	P49457	SWISSPROT	TCBAP2E1500 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP1890
10283	23208	36693	0.57	2.0E-05	AL163207.2	NT	COMPLEMENT DECAY-ACCELERATING FACTOR (CD55)
10494	23416	36914	0.87	2.0E-05	BF055639.1	EST_HUMAN	COMPLEMENT DECAY-ACCELERATING FACTOR (CD55)
10654	23874	37387	2.1	2.0E-05	N41751.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C007
10954	23874	37388	2.1	2.0E-05	N41751.1	EST_HUMAN	7f75g09.y1 NCI_OGAP_Bim20 Homo sapiens cDNA clone IMAGE:3340576.5'
10954	23874	37388	2.1	2.0E-05	N41751.1	EST_HUMAN	yw91a08.r1 Soares_placenta_8to9weeks_2NkHP8to9W Homo sapiens cDNA clone IMAGE:258670.5'
10954	23874	37388	2.1	2.0E-05	N41751.1	EST_HUMAN	yw91a08.r1 Soares_placenta_8to9weeks_2NkHP8to9W Homo sapiens cDNA clone IMAGE:258670.5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11006	20042		2.01	2.0E-05	A1991025.1	EST_HUMAN	wu35107.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2522077 3'
11781	23836	37457	1.9	2.0E-05	BE175801.1	EST_HUMAN	RCS-HT0582-280300-012-E12 HT0582 Homo sapiens cDNA
12473	25740		6.5	2.0E-05	BE348228.1	EST_HUMAN	hw21a03.x1 NCI_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:3183532 3' similar to TR-Q12832
12828	25727		1.54	2.0E-05	AF275948.1	NT	Q12832 GLYCOPHORIN HEP2;
12768	25409	31759	1.49	2.0E-05	AU131513.1	EST_HUMAN	Homo sapiens ABCA1 (ABCA1) gene, complete cds
2705	15802	28715	3.2	1.0E-05	AL163282.2	EST_HUMAN	AU131513 NTZRP3 Homo sapiens cDNA clone NTZRP-3002707 5'
3663	16706	28821	1.88	1.0E-05	AF088273.1	NT	Homo sapiens chromosome 21 segment HS21C082
3828	16866		1.17	1.0E-05	AF223391.1	NT	Drosophila melanogaster strain Lambo 120 Suppressor of Hairless (Su(H)) gene, partial cds
3891	17031	28940	10.43	1.0E-05	P81274	SWISSPROT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
4201	17232	30119	1.82	1.0E-05	AL163203.2	NT	MOSAIC PROTEIN LGN
4308	17335	30213	1.77	1.0E-05	AA431119.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
4887	17804	30783	1.82	1.0E-05	AW419134.1	EST_HUMAN	zw88g04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781494 5'
5005	18019	30807	0.94	1.0E-05	Z18943.1	NT	xy49g11.x1 NCI_CGAP_Lu34.1 Homo sapiens cDNA clone IMAGE:2866548 3'
6015	18987	33262	1.03	1.0E-05	AJ246003.1	NT	H. sapiens repeat region
7028	18360	31281	0.52	1.0E-05	P08548	SWISSPROT	Homo sapiens Spect gene for spectin protein
7288	20063	33370	3.02	1.0E-05	AA641846.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7288	20260	33594	8.81	1.0E-05	4505844	NT	ns19g02.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1184114 3' similar to contains L1.H1 L1
7921	20884	34252	0.68	1.0E-05	BF222846.1	EST_HUMAN	L1 repetitive element;
8057	20894		1.5	1.0E-05	P10474	SWISSPROT	Homo sapiens phospholipase A2, group X (PLA2G10) mRNA, and translated products
8268	22232		2.45	1.0E-05	AL163227.2	NT	7p37d01.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:3849845 3' similar to contains MER10.b3
9415	22380	35818	2.22	1.0E-05	AA452578.1	EST_HUMAN	MER10 repetitive element;
9842	22586	36035	14.03	1.0E-05	AA236110.1	EST_HUMAN	52 KD RO PROTEIN (SJOGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RQ(SS-A))
9721	22749	36201	0.82	1.0E-05	AV732180.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
10188	23123	36809	0.79	1.0E-05	AW510802.1	EST_HUMAN	z35h12.s1 Soares_totid_fetus_Nb2HF8 9w Homo sapiens cDNA clone IMAGE:788519 3' similar to
10188	23123	36610	0.79	1.0E-05	AW510802.1	EST_HUMAN	gb102892 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN);
10278	23201	36865	1.11	1.0E-05	AW281521.1	EST_HUMAN	z305e11.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:684332 5' similar to contains Alu
							repetitive element/contains element TAR1 repetitive element;
							AV732180 HTF Homo sapiens cDNA clone HTFBH01 5'
							hd41b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912043 3' similar to contains
							OFR.H1 OFR repetitive element;
							hd41b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912043 3' similar to contains
							OFR.H1 OFR repetitive element;
							UIH-B12-agk-a-08-0-UJ.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724398 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10278	23201	36888	1.11	1.0E-05	AW281521.1	EST_HUMAN	U1-H-BI2-agg-e-08-0-J1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724398 3'
10544	23469		1.95	1.0E-05	AW468995.1	EST_HUMAN	ha07c10.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2873010 3' similar to contains L1.12 L1 repetitive element;
11284	24216	37740	1.79	1.0E-05	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
11284	24216	37741	1.79	1.0E-05	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
12941	25900	31421	1.43	1.0E-05	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2680	15676	28697	6.9	9.0E-06	AI58381.1	EST_HUMAN	tt73a06.x1 NCI_CGAP_HSC3 Homo sapiens cDNA clone IMAGE:2246386 3'
3112	16189	29079	4.25	9.0E-06	AI218983.1	EST_HUMAN	gg11a08.x1 Soares_placenta_8to8weeks_2NtHP81b6W Homo sapiens cDNA clone IMAGE:1759191 3'
3624	16887		2.82	9.0E-06	M61755.1	NT	Human alanine:glyoxylate aminotransferase (AGXT) gene, exons 1 and 2
6008	19091	32291	2.31	9.0E-06	L23416.1	NT	Homo sapiens differentiation antigen CD20 gene, exons 5, 6
7047	20069	33375	0.73	9.0E-06	BE065042.1	EST_HUMAN	RC1-BT0313-110500-017-407 BT0313 Homo sapiens cDNA
7674	20632	33998	0.94	9.0E-06	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8053	20990	34398	11.84	9.0E-06	AI034370.1	EST_HUMAN	alpha20g01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1666912 3' similar to contains Alu repetitive element;
8807	21774	35200	1.18	9.0E-06	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8834	22299	35728	2.51	9.0E-06	Q63789	SWISSPROT	SUSHI REPEAT-CONTAINING PROTEIN SRPX PRECURSOR (DRS PROTEIN) (DOWN-REGULATED BY V-SRC)
9334	22299	35729	2.51	9.0E-06	Q63789	SWISSPROT	SUSHI REPEAT-CONTAINING PROTEIN SRPX PRECURSOR (DRS PROTEIN) (DOWN-REGULATED BY V-SRC)
9577	22539	35990	4.44	9.0E-06	U35114.1	NT	Human apolipoprotein E (APOE) gene, hepatic control region HCR-2
11286	24236	37703	3.65	9.0E-06	Q10384	SWISSPROT	PUTATIVE SERINE/THREONINE-PROTEIN KINASE C22E12.14C
2535	15896	28559	2.23	8.0E-06	AW362639.1	EST_HUMAN	RC3-CT0283-201199-011-111 CT0283 Homo sapiens cDNA
10898	23818	37326	0.64	8.0E-06	P34083	SWISSPROT	FASCICLIN II, PHOSPHATIDYLINOSITOL-LINKED ISOFORM PRECURSOR (FAS II)
10898	23818	37327	0.64	8.0E-06	P34083	SWISSPROT	FASCICLIN II, PHOSPHATIDYLINOSITOL-LINKED ISOFORM PRECURSOR (FAS II)
980	14031		2.14	7.0E-06	AA689729.1	EST_HUMAN	ab60f10.s1 Striatagene lung (#937210) Homo sapiens cDNA clone IMAGE:854251 3' similar to contains MER20.t1 MER20 repetitive element;
1433	14467	27444	3.05	7.0E-06	7982177	NT	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
2884	15943		7.94	7.0E-06	AI988252.1	EST_HUMAN	qw16g09.x1 NCI_CGAP_U18 Homo sapiens cDNA clone IMAGE:1891296 3' similar to contains Alu repetitive element;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3578	16821		0.78	7.0E-06	AA385642.1	EST_HUMAN	EST18205 Thyroid Hormo sapiens cDNA 5' end similar to EST containing L1 repeat
5780	18872		5.16	7.0E-06	AW883141.1	EST_HUMAN	QV2-OT0062-250400-173-H01 OT0062 Homo sapiens cDNA
5902	18889	32179	0.81	7.0E-06	N88845.1	EST_HUMAN	YW5507.r1 Soares_multiple_sclerosis_2/NHIMSP Homo sapiens cDNA clone IMAGE:278412 5'
8141	22107	35533	0.7	7.0E-06	11420709	NT	Homo sapiens DNA segment, numerous copies, expressed probes (GS1 gene) (DXF8831E), mRNA
10280	23185		0.54	7.0E-06	Q61147	SWISSPROT	CERULOPLASMIN PRECURSOR (FERROXIDASE)
12202	26027	31307	2.83	7.0E-06	BF215872.1	EST_HUMAN	601881522F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:408972 5'
2828	18888	28907	1.27	8.0E-06	BE068188.1	EST_HUMAN	QV3-BT0378-010300-105-d11 BT0378 Homo sapiens cDNA
3708	18749	28864	1.08	8.0E-06	BE068189.1	EST_HUMAN	QV3-BT0378-010300-105-d11 BT0378 Homo sapiens cDNA
4785	18010	28896	2.35	8.0E-06	Q01468	SWISSPROT	OVARIAN ABUNDANT MESSAGE PROTEIN (OAM PROTEIN)
4794	17811	30703	2.54	8.0E-06	A040089.1	EST_HUMAN	ox08e02.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1655738 3' similar to contains MER8.12 MER8 repetitive element;
5422	18526	31403	1.41	8.0E-06	AF187441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
5483	18583	31495	1.05	8.0E-06	Q02040	SWISSPROT	PROTEIN XE7
10215	23140		1.52	8.0E-06	AW801912.1	EST_HUMAN	IL5-UM0070-10400-063-g02 UM0070 Homo sapiens cDNA
13041	25582	31700	1.74	8.0E-06	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CAGNA1I), mRNA
6178	18254	32487	3.86	5.0E-06	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
6471	18536	32784	3.98	5.0E-06	U07561.1	NT	Human ABL gene, exon 1b and intron 1b, and putative M8604 Met protein (M8604 Met) gene, complete cds
7444	20410	33782	1.14	5.0E-06	AB007546.1	NT	Homo sapiens gene for LECT2, complete cds
8803	21770	35195	0.49	5.0E-06	AW856972.1	EST_HUMAN	RC1-CT0302-120200-019-H02 CT0302 Homo sapiens cDNA
8803	21770	35196	0.49	5.0E-06	AW856972.1	EST_HUMAN	RC1-CT0302-120200-019-H02 CT0302 Homo sapiens cDNA
10462	23384	36877	7.1	5.0E-06	AA313620.1	EST_HUMAN	EST185486 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
12101	24972	38568	2	5.0E-06	Q28039	SWISSPROT	SODIUM- AND CHLORIDE-DEPENDENT GLYCINE TRANSPORTER 1 (GLYT-1)
12928	25512	31709	2.14	5.0E-06	A065045.1	EST_HUMAN	HA0877 Human fetal liver cDNA library Homo sapiens cDNA
648	13714	26855	6.59	4.0E-06	R16287.1	EST_HUMAN	ye48c03.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:53254 5' similar to contains Alu repetitive element; contains L1 repetitive element;
847	13903	26861	6.33	4.0E-06	AW103954.1	EST_HUMAN	xc68q12.x1 NCL_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:2588574 3' similar to contains Alu repetitive element; contains element MER21 repetitive element;
1337	14371	27340	4.22	4.0E-06	A034928.1	EST_HUMAN	ts33e09.x1 NCL_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056188 3'
1337	14371	27341	4.22	4.0E-06	A034928.1	EST_HUMAN	ts33e09.x1 NCL_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056188 3'
1470	14503	27477	2.58	4.0E-06	BF365612.1	EST_HUMAN	QV2-NT0046-200600-250-H07 NT0046 Homo sapiens cDNA
2274	15287	28313	3.05	4.0E-06	AW015401.1	EST_HUMAN	UHH-B10-ast-f-05-0-U1.s1 NCL_CGAP_Sub01 Homo sapiens cDNA clone IMAGE:2710425 3'
3076	16133	28046	0.94	4.0E-06	AF198348.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3909	18949	28860	1.1	4.0E-06	AW848295.1	EST_HUMAN	IL3-CT0214-150200-074-B03 CT0214 Homo sapiens cDNA
4846	17863	30758	2.18	4.0E-06	A1866939.1	EST_HUMAN	w194c10.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2432562 3' similar to contains element MER22 repetitive element;
8844	21811	35230	0.58	4.0E-06	O15393	SWISSPROT	TRANSMEMBRANE PROTEASE, SERINE 2
9152	22118	35545	3.6	4.0E-06	AF009660.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
10066	22983	36462	1.14	4.0E-06	AJ272265.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
11778	23033	37454	2.91	4.0E-06	AB007955.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0488
2173	15189	28209	1.9	3.0E-06	AA700562.1	EST_HUMAN	z34b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:432683 3' similar to contains L1.1 L1 repetitive element;
2173	15189	28210	1.9	3.0E-06	AA700592.1	EST_HUMAN	z34b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:432683 3' similar to contains L1.1 L1 repetitive element;
2276	16288		1.89	3.0E-06	AF202635.1	NT	Homo sapiens PP1200 mRNA, complete cds
2833	15891	28811	0.95	3.0E-06	AA868218.1	EST_HUMAN	ak48g11.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409252 3' similar to contains LTR1.03 LTR1 repetitive element;
3279	16333		2.32	3.0E-06	A1857779.1	EST_HUMAN	w122805.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2425616 3' similar to TRC060734 O60734 LINE-1 LIKE PROTEIN; contains L1.12 L1 repetitive element;
3797	16837	29743	1.12	3.0E-06	BE047094.1	EST_HUMAN	hg64d12.x1 NCI_CGAP_HN13 Homo sapiens cDNA clone IMAGE:3124151 3'
3797	16837	29744	1.12	3.0E-06	BE047094.1	EST_HUMAN	hg64d12.x1 NCI_CGAP_HN13 Homo sapiens cDNA clone IMAGE:3124151 3'
4501	17528	30411	0.67	3.0E-06	T60268.1	EST_HUMAN	y678b10.r1 Stratagene ovary (#837217) Homo sapiens cDNA clone IMAGE:77275 5' similar to contains L1 repetitive element
4594	17615	30509	4.02	3.0E-06	X54818.1	NT	Homo sapiens gene for alpha-1-microglobulin-betaunit, exons 1-5 (encoding alpha-1-microglobulin, N-term).
6284	19358	32592	0.74	3.0E-06	AU159412.1	EST_HUMAN	AU159412 THYRO1 Homo sapiens cDNA clone THYRO1001602 3'
6874	20197	33525	0.58	3.0E-06	Z79478.1	NT	H.sapiens flow-sorted chromosome 6 Tagl fragment, SC8pAGE5
6874	20197	33526	0.58	3.0E-06	Z79478.1	NT	H.sapiens flow-sorted chromosome 6 Tagl fragment, SC8pAGE5
7439	20406		1.9	3.0E-06	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8419	21388	34788	0.76	3.0E-06	BE562894.1	EST_HUMAN	601336218f1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690314 5'
9032	21988	35417	0.64	3.0E-06	P07743	SWISSPROT	PAROTID SECRETORY PROTEIN PRECURSOR (PSP)
12631	25317		6.4	3.0E-06	AW385262.1	EST_HUMAN	RCO-LT0001-261189-011-A03 LT0001 Homo sapiens cDNA
203	13304		3.24	2.0E-06	P54366	SWISSPROT	HOMEBOX PROTEIN GOOSECOID
1572	14605		5.6	2.0E-06	P21414	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
2387	15395	28420	2.64	2.0E-06	A1672138.1	EST_HUMAN	wed4e03.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2297088 3' similar to contains MIER30.b1
2474	15478	28501	2.73	2.0E-06	P04929	SWISSPROT	MIER30 repetitive element; HISTIDINE-RICH GLYCOPROTEIN PRECURSOR

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2673	16574	28684	1.04	2.0E-06	P08719	SWISSPROT	KNOB-ASSOCIATED HISTIDINE-RICH PROTEIN PRECURSOR (KAHRP)
3331	16577	28500	1.28	2.0E-06	AV657555.1	EST_HUMAN	AV657555 GLC Homo sapiens cDNA clone GLCFDB05 3'
3774	18816	29726	1.56	2.0E-06	AA173518.1	EST_HUMAN	zp02605.J1 Stratiene ovarian cancer (#637219) Homo sapiens cDNA clone IMAGE:565232 5'
3783	16824	29732	0.67	2.0E-06	AW450215.1	EST_HUMAN	UIH-B13-aly-g-05-0.U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736178 3'
3789	16830	29738	1.74	2.0E-06	AB030896.1	NT	Mus musculus gene for odorant receptor A16, complete cds
6208	18282		0.9	2.0E-06	AA974932.1	EST_HUMAN	or34h01.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1688608 3' similar to contains Alu repetitive element
6241	19314	32544	0.93	2.0E-06	AI539448.1	EST_HUMAN	ts5105.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090241 3' similar to TR-Q13537
6581	19841	32908	5.37	2.0E-06	AI819424.1	EST_HUMAN	Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
8250	21219		0.81	2.0E-06	AW869223.1	EST_HUMAN	wf50b04.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410083 3'
8428	21395	34806	0.63	2.0E-06	T12238.1	EST_HUMAN	MF3-SN0097-120400-002-02 SN0097 Homo sapiens cDNA
9188	22154		0.61	2.0E-06	AA772497.1	EST_HUMAN	A447R Heart Homo sapiens cDNA clone A447
9200	22186	35586	1.83	2.0E-06	H62051.1	EST_HUMAN	zh27c11.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:413300 3' similar to
9571	22533	35883	0.87	2.0E-06	AF003528.1	NT	TRP70467 P70467 REVERSE TRANSCRIPTASE ;
9571	22533	35884	0.87	2.0E-06	AF003528.1	NT	y637c04.J1 Soares_ova_tumor_NbHOT Homo sapiens cDNA clone IMAGE:235974 5' similar to gb-X74828
9591	22553		0.48	2.0E-06	AI473450.1	EST_HUMAN	KERATIN, TYPE II CYTOSKELETAL 8 (HUMAN);
10059	22866	36454	0.92	2.0E-06	N30576.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
10278	23204		0.61	2.0E-06	AV748968.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
12111	24681	38581	2.21	2.0E-06	O15553	SWISSPROT	#18g10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141730 3'
12111	24681	38582	2.21	2.0E-06	O15553	SWISSPROT	yw68e03.s1 Soares_placenta_8to9weeks_2NblHP609W Homo sapiens cDNA clone IMAGE:257212 3'
12540	25828	31308	2.97	2.0E-06	P23249	SWISSPROT	AV748969 NPC Homo sapiens cDNA clone NPCAXD05 5'
36	13158	26057	3.02	1.0E-06	O76082	SWISSPROT	PYRIN (MARENOSTRIN)
658	13724	26848	1.98	1.0E-06	AF084364.1	NT	PYRIN (MARENOSTRIN)
1445	14478	27454	1.81	1.0E-06	P09125	SWISSPROT	PROTEIN MOV-10
1527	14560	27631	1.67	1.0E-06	AL163278.2	NT	ORGANIC CATION/CARNITINE TRANSPORTER 2 (SOLUTE CARRIER FAMILY 22, MEMBER 5) (HIGH-AFFINITY SODIUM-DEPENDENT CARNITINE COTRANSPORTER)
1578	14609	27592	1.22	1.0E-06	AA034141.1	EST_HUMAN	Mus musculus DdMUSE protein (DdMUSE) mRNA, complete cds
1576	14609	27683	1.22	1.0E-06	AA034141.1	EST_HUMAN	MEROZONTE SURFACE PROTEIN CMZ-3
							Homo sapiens chromosome 21 segment HS21C078
							z06a12.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429882 3' similar to
							contains Alu repetitive element;
							z06a12.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429882 3' similar to
							contains Alu repetitive element;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1597	14620		1.38	1.0E-06	P27825	SWISSPROT	DNA-DIRECTED RNA POLYMERASE III LARGEST SUBUNIT
2010	15031	28040	5.53	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
2010	15031	28041	5.53	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
4397	17425	30309	13.21	1.0E-06	U07691.1	NT	Human ABL gene, exon 1b and intron 1b, and putative M8604 Met protein (M8604 Met) gene, complete cds
5148	18155	31034	1.23	1.0E-06	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5148	18155	31035	1.23	1.0E-06	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5363	18468	31339	4.63	1.0E-06	BF333015.1	EST_HUMAN	MR1-BT0800-030700-002-c08 BT0800 Homo sapiens cDNA
5368	18491	31367	1.01	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-c04 FN0004 Homo sapiens cDNA
5368	18491	31368	1.01	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-c04 FN0004 Homo sapiens cDNA
5552	18649	31562	1.24	1.0E-06	O80613	SWISSPROT	15 kDa SELENOPROTEIN PRECURSOR
5882	18680		0.84	1.0E-06	BE063527.1	EST_HUMAN	GM0-BT0281-031199-087-h04 BT0281 Homo sapiens cDNA
7056	20078	33387	6.4	1.0E-06	P02671	SWISSPROT	FIBRINOGEN ALPHA1/ALPHA-E CHAIN PRECURSOR
8018	26005		0.56	1.0E-06	BE185330.1	EST_HUMAN	IL5-HT0730-020500-074-g01 HT0730 Homo sapiens cDNA
8334	21303		0.75	1.0E-06	AA912623.1	EST_HUMAN	c28a08.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1624878 3'
8616	21584	35000	1.05	1.0E-06	AB347010.1	EST_HUMAN	qp54a02.x1 NCI_CGAP_C08 Homo sapiens cDNA clone IMAGE:1928842 3'
							qv23f06.x1 NCI_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:1982435 3' similar to contains element
8853	21800	35219	1.26	1.0E-06	AL287878.1	EST_HUMAN	MIR repetitive element;
9659	22816	36270	1.15	1.0E-06	NT4635.1	EST_HUMAN	zsf55a01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:286472 3'
9734	22762	36217	0.55	1.0E-06	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
10041	22988	36434	3.97	1.0E-06	U82688.1	NT	Homo sapiens ehox gene, alternatively spliced products, complete cds
10041	22988	36435	3.97	1.0E-06	U82688.1	NT	Homo sapiens ehox gene, alternatively spliced products, complete cds
10085	23012	36485	4.9	1.0E-06	AA132611.1	EST_HUMAN	z017a08.r1 Stratiagena colon (#837204) Homo sapiens cDNA clone IMAGE:587174 5'
							z04d11.s1 Soares_fetal_fetus_Nb2-IF8_9w Homo sapiens cDNA clone IMAGE:785493 3' similar to
10147	23073		3.89	1.0E-06	AA449257.1	EST_HUMAN	gb-D28129 RIBONUCLEASE PANKREATIC PRECURSOR (HUMAN);
10854	23774		2.02	1.0E-06	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
11950	24639		3.14	1.0E-06	AW860941.1	EST_HUMAN	RC4-NT0054-120500-012-b03 NT0054 Homo sapiens cDNA
12672	15031	28040	1.71	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
12672	15031	28041	1.71	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
360	13447	26374	1.95	9.0E-07	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
360	13447	26375	1.95	9.0E-07	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
8750	21718		0.59	9.0E-07	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
8898	21864		0.43	9.0E-07	AA448278.1	EST_HUMAN	zw63h01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:782833 3'
11577	24515	38070	4.11	9.0E-07	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4804	17821	30716	3.87	8.0E-07	AI288598.1	EST_HUMAN	qR2q07.x1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
4804	17821	30716	3.87	8.0E-07	AI288598.1	EST_HUMAN	qR2q07.x1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
5888	19073		8.55	8.0E-07	P21414	SWISSPROT	POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
8335	21304		11.24	8.0E-07	AF135416.1	NT	Homo sapiens UDP-glucuronosyltransferase gene, complete cds
11943	24823		5.78	8.0E-07	T07770.1	EST_HUMAN	EST05660 Fetal brain, Stratiene (cat#936206) Homo sapiens cDNA clone HFBEN89
12183	25031		8.17	8.0E-07	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5597	18693	31663	0.73	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
5597	18693	31664	0.73	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
1928	14952	27948	4.88	8.0E-07	AW855558.1	EST_HUMAN	CM3-CT0277-221089-024-811 CT0277 Homo sapiens cDNA
							Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SK12W), RD, complement factor B (Bf), and complement component C2 (C2) genes, >
2500	15503	28530	5.38	6.0E-07	AF019413.1	NT	HYPOTHETICAL 24.1 KD PROTEIN IN LEF4-P33 INTERGENIC REGION
3898	17036		2.25	6.0E-07	P41479	SWISSPROT	7p9407.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3314149 3' similar to TR:O75920 O75920 4F5L.
9497	22481	35802	2.17	6.0E-07	BF001887.1	EST_HUMAN	CM4-NN1028-250300-121-h12 NN1028 Homo sapiens cDNA
12442	25880		3.45	6.0E-07	AW903222.1	EST_HUMAN	wh64f10.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385547 3'
326	13417		0.99	5.0E-07	AI831893.1	EST_HUMAN	EST33615 Supt cells Homo sapiens cDNA 5' end
1080	14108		2.45	5.0E-07	AA390630.1	EST_HUMAN	wh64f10.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385547 3'
3044	16101		0.68	5.0E-07	AI831893.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 4 through 14 and complete cds
4876	17697	30584	1.16	5.0E-07	AF149774.1	NT	Mus musculus OG-2 homeodomain protein (OG-2) gene, partial cds
6242	19315	32545	1.23	5.0E-07	U65067.1	NT	ig06505.x1 NCL_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2107953 3' similar to contains Alu
7266	20001	33300	1.68	5.0E-07	AI393981.1	EST_HUMAN	repetitive element; contains element A3R repetitive element;
7268	20001	33301	1.68	5.0E-07	AI393981.1	EST_HUMAN	ig06505.x1 NCL_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2107953 3' similar to contains Alu
7671	20534	33862	15.74	5.0E-07	AW070885.1	EST_HUMAN	repetitive element; contains element A3R repetitive element;
8618	21596	35002	0.87	5.0E-07	Q8WUQ1	SWISSPROT	xs31a02.x1 NCL_CGAP_Br18 Homo sapiens cDNA clone IMAGE:2568362 3' similar to gb:U15341
8835	21802		1.86	5.0E-07	P09583	SWISSPROT	CYTOCHROME C OXIDASE POLYPEPTIDE VIA-LIVER (HUMAN);
10732	23654	37147	5.39	5.0E-07	AI008587.1	EST_HUMAN	ADAM-TS 1 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN
11845	24728	38314	3.52	5.0E-07	P11087	SWISSPROT	MOTIFS 1 (ADAMTS-1) (ADAM-TS1)
11906	24787		2.12	5.0E-07	AJ271735.1	NT	SANTIGEN PROTEIN PRECURSOR
12842	25780		4.14	5.0E-07	AW862837.1	EST_HUMAN	CM-BT178-220489-014 BT178 Homo sapiens cDNA
							COLLAGEN ALPHA 1(I) CHAIN PRECURSOR
							Homo sapiens Xq pseudautosomal region; segment 1/2
							QV0-CT0383-210400-204-b12 CT0383 Homo sapiens cDNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4024	17062	28984	1.81	4.0E-07	AW009602.1	EST_HUMAN	w84h05.x1 NCI_CGAP_Os3 Homo sapiens cDNA clone IMAGE:2504687 3'
7384	20354		0.81	4.0E-07	AJ27285.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
7482	20448	33804	1.3	4.0E-07	Q9ZNV6	SWISSPROT	HISTONE DEACETYLASE 6 (HD6) (HISTONE DEACETYLASE MHDA1)
7482	20448	33805	1.3	4.0E-07	Q9ZNV6	SWISSPROT	HISTONE DEACETYLASE 5 (HD5) (HISTONE DEACETYLASE MHDA1)
8255	21224	34634	0.63	4.0E-07	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
9406	22371	35808	5.52	4.0E-07	AW419134.1	EST_HUMAN	xy4Bg11.x1 NCI_CGAP_Lu34.1 Homo sapiens cDNA clone IMAGE:2856548 3'
10486	23408	36804	0.48	4.0E-07	BE001975.1	EST_HUMAN	601676748F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3869861 5'
10486	23408	36805	0.48	4.0E-07	BE001975.1	EST_HUMAN	601676748F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3869861 5'
10688	23610	37105	0.47	4.0E-07	AL163218.2	NT	601676748F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3869861 5'
11284	24234	37760	2.8	4.0E-07	A165528.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C018
11284	24234	37761	2.8	4.0E-07	A165528.1	EST_HUMAN	w81508.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2399703 3'
11555	24495		2.72	4.0E-07	BE001828.1	EST_HUMAN	w81508.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2399703 3'
							PM1-BN0083-090300-003-012 BN0083 Homo sapiens cDNA
							Human microfilament-associated glycoprotein (MFAP2) gene, putative promoter region and alternatively spliced untranslated exons
441	19515	28448	4.77	3.0E-07	U19719.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
585	13653	26567	3.11	3.0E-07	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1375	14408	27379	2.82	3.0E-07	M89149.1	NT	Human polymorphic microsatellite DNA
1630	14863		2.45	3.0E-07	M84857.1	NT	Human Igk subgroup 1 germ-line gene, exons 1 and 2, V-region 018 allele
							nt58809.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:980825 similar to contains Alu repetitive element; contains L1.13 L1 repetitive element;
2062	15080		1.01	3.0E-07	AA520763.1	EST_HUMAN	element; contains L1.13 L1 repetitive element;
2296	15308	28330	2.58	3.0E-07	M89149.1	NT	Human polymorphic microsatellite DNA
2477	15481	28505	6.03	3.0E-07	BE005077.1	EST_HUMAN	MR0-BN0115-020300-001-f11 BN0115 Homo sapiens cDNA
2477	15481	28508	6.03	3.0E-07	BE005077.1	EST_HUMAN	MR0-BN0115-020300-001-f11 BN0115 Homo sapiens cDNA
3047	16104	29018	0.8	3.0E-07	T84704.1	EST_HUMAN	y450712.1 Soares fetal liver spleen TINF5 Homo sapiens cDNA clone IMAGE:111695 5'
3173	16228	29144	1.71	3.0E-07	P38739	SWISSPROT	HYPOTHETICAL 63.8 KD PROTEIN IN GUT1-RIM1 INTERGENIC REGION PRECURSOR
4706	17727		0.74	3.0E-07	P20740	SWISSPROT	OVOSTATIN PRECURSOR (OVOMACROGLOBULIN)
4758	17778	30673	8.86	3.0E-07	AV650201.1	EST_HUMAN	AV650201 GLC Homo sapiens cDNA clone GLC0001 3'
4796	17813	30708	0.81	3.0E-07	A197236.1	EST_HUMAN	w86b12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347867 3'
							y414h09.s1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:2347867 3'
5103	18113	30985	2.02	3.0E-07	T57850.1	EST_HUMAN	gb-M62882 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)
							y414h09.s1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:80705 3' similar to similar to
5103	18113	30986	2.02	3.0E-07	T57850.1	EST_HUMAN	gb-M62882 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)
							gb-M62882 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)
5749	18943	32026	9.02	3.0E-07	O88907	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
6085	19165	32377	0.73	3.0E-07	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6861	18914		5.12	3.0E-07	AA916176.1	EST_HUMAN	cc04c10.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1338880 3'
7752	20705	34074	3.28	3.0E-07	AW797188.1	EST_HUMAN	QV7-UM0038-200300-115-g02 UM0038 Homo sapiens cDNA
7925	20868		1.09	3.0E-07	AI591085.1	EST_HUMAN	hw28f11.x1 NCI_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2261037 3' similar to contains Alu repetitive element; contains element MSR1 MSR1 repetitive element ;
13083	25814		7.27	3.0E-07	AJ123252.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
31	13161	28051	4.19	2.0E-07	AF282888.1	NT	Homo sapiens TRF2-interacting telomeric RAP1 protein (RAP1) mRNA, complete cds
155	13258	28185	6.64	2.0E-07	L77589.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
155	13258	28188	6.64	2.0E-07	L77589.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
183	13283	28208	152.51	2.0E-07	U38849.1	NT	Fugu rubripes beta-cytoplasmic (vesicular) actin gene, complete cds
748	13810	28751	1.29	2.0E-07	AF003630.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
749	13810	28752	1.29	2.0E-07	AF003630.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
760	13820		0.87	2.0E-07	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
942	13885	28847	3.12	2.0E-07	AA223280.1	EST_HUMAN	z08b07.s1 Striatogene NT2 neuronal precursor 987230 Homo sapiens cDNA clone IMAGE:650889 3' similar to gbL31860 GLYOPHORIN A PRECURSOR (HUMAN); contains Alu repetitive element;
943	13886	28848	7.18	2.0E-07	T63042.1	EST_HUMAN	yc15g04.s1 Striatogene lung (#637210) Homo sapiens cDNA clone IMAGE:80780 3' similar to contains L1 repetitive element ;
1167	14208	27162	1.16	2.0E-07	Q28788	SWISSPROT	I/6 AUTOANTIGEN
1604	14636	27613	2.35	2.0E-07	Q09701	SWISSPROT	HYPOTHETICAL 72.5 KD PROTEIN C2F7.10 IN CHROMOSOME 1
3633	16876		0.88	2.0E-07	BF131987.1	EST_HUMAN	601818916F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4044891 5'
3700	16743	28658	17.94	2.0E-07	AF125348.1	NT	Homo sapiens caveolin 1 (CAV1) gene, exon 3 and partial cds
4195	17228	30115	1.42	2.0E-07	AI873583.1	EST_HUMAN	WK20H04.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2412819 3'
5417	18520	31397	1.71	2.0E-07	AW898086.1	EST_HUMAN	RC3-NN0068-260400-021-g11 NN0068 Homo sapiens cDNA
6702	25855	33037	0.8	2.0E-07	AW448968.1	EST_HUMAN	UHH-B13-alc-b-01-0-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2734008 3'
6820	19874	33163	1.63	2.0E-07	AI208715.1	EST_HUMAN	qg56d05.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1839177 3'
6832	19885	33178	0.81	2.0E-07	AA572953.1	EST_HUMAN	nm83a06.s1 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:1061838 similar to contains Alu repetitive element;
8813	21780		4.23	2.0E-07	AV728380.1	EST_HUMAN	AV728380 HTC Homo sapiens cDNA clone HTCAEG302 5'
9043	22009	35430	0.99	2.0E-07	AA035198.1	EST_HUMAN	zk27g09.s1 Soares_pregnant uterus_NbrJPU Homo sapiens cDNA clone IMAGE:471808 3'
10119	23045		1.8	2.0E-07	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10830	23552	37052	6.11	2.0E-07	AW892507.1	EST_HUMAN	CMA-NN0003-280300-124-e08 NN0003 Homo sapiens cDNA
10855	23775	37272	0.92	2.0E-07	P00751	SWISSPROT	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B) (GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10855	23775	37273	0.92	2.0E-07	P00751	SWISSPROT	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B) (GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)
12138	25503		2.86	2.0E-07	BE153717.1	EST_HUMAN	PM0-HT0339-260100-006-H07 HT0339 Homo sapiens cDNA
12224	25781		1.86	2.0E-07	A1732462.1	EST_HUMAN	zn85h11.x5 Stragene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565029 3' similar to contains THR.b2 THR repetitive element:
1104	14148		1.46	1.0E-07	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
2838	14558	27628	2.05	1.0E-07	P09256	SWISSPROT	GLYCOPROTEIN GPV
3757	14148		1.25	1.0E-07	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
4321	17350	30734	3.01	1.0E-07	AV718682.1	EST_HUMAN	AV718682 GLC Homo sapiens cDNA clone GLOFN104 5'
4321	17350	30235	3.01	1.0E-07	AV718682.1	EST_HUMAN	AV718682 GLC Homo sapiens cDNA clone GLOFN104 5'
6862	19709	32986	0.82	1.0E-07	U82871.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), catractin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and L1>
7050	20072	33378	4.44	1.0E-07	BE047871.1	EST_HUMAN	tz43d06.y1 NCI CGAP Bm52 Homo sapiens cDNA clone IMAGE:2281339 5'
7050	20072	33379	4.44	1.0E-07	BE047871.1	EST_HUMAN	tz43d06.y1 NCI CGAP Bm52 Homo sapiens cDNA clone IMAGE:2281339 5'
7735	20690	34054	9.42	1.0E-07	N55081.1	EST_HUMAN	y43c07.s1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:245484 3'
7910	20853	34240	0.89	1.0E-07	BF375909.1	EST_HUMAN	PM4-TN0024-030800-002-b05 TN0024 Homo sapiens cDNA
7910	20853	34241	0.89	1.0E-07	BF375909.1	EST_HUMAN	PM4-TN0024-030800-002-b05 TN0024 Homo sapiens cDNA
7940	20882	34272	1.27	1.0E-07	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
8558	21526	34944	2.28	1.0E-07	P87435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
8558	21526	34945	2.28	1.0E-07	P87435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
9308	22271	35702	2.83	1.0E-07	AA693578.1	EST_HUMAN	z51c10.s1 Soares fetal liver spleen 1N1LS S1 Homo sapiens cDNA clone IMAGE:434348 3'
9625	22509	36018	0.86	1.0E-07	P57110	SWISSPROT	ADAM-TS 8 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 8) (ADAMTS-8) (ADAM-TS8) (METH-2)
9976	22902	36368	0.53	1.0E-07	BE327843.1	EST_HUMAN	huz28h06.x1 NCI CGAP_Maf15 Homo sapiens cDNA clone IMAGE:3171419 3' similar to contains MER18.13
10286	23221	36705	2.5	1.0E-07	BF674624.1	EST_HUMAN	MER18 repetitive element:
10304	23229	36712	1.26	1.0E-07	AA386311.1	EST_HUMAN	60213714F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274428 5'
10831	23752		2.53	1.0E-07	AL163282.2	NT	EST185054 Brain IV Homo sapiens cDNA
12500	23756	31517	4.03	1.0E-07	BE048770.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
12634	25320		1.59	1.0E-07	X64467.1	NT	h53c11.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132212 3' similar to TR:085722 095722 DU1163J1.1:
12793	25423		1.89	1.0E-07	X51755.1	NT	H. sapiens ALAD gene for porphobilinogen synthase
7498	20463	33823	0.84	9.0E-08	AI536962.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10247	23172	36861	2.18	9.0E-08	AV734819.1	EST_HUMAN	AV734819 cDNA Homo sapiens cDNA clone cdABFB06 5'
11515	24458	38008	1.46	9.0E-08	AI891052.1	EST_HUMAN	wn30807.x1 NC1_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2446832 3' similar to contains OFR.12
11977	24854	38452	2.32	9.0E-08	AL163301.2	NT	OFR repetitive element;
12463	25212		3.51	9.0E-08	AJ251973.1	NT	Homo sapiens chromosome 21 segment HS21C101
609	15945		2.97	8.0E-08	AI911352.1	EST_HUMAN	Homo sapiens partial steerin-1 gene
1052	14098		0.77	8.0E-08	BE785489.1	EST_HUMAN	wd16605x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2328273 3'
3555	16601		2.07	8.0E-08	BE785489.1	EST_HUMAN	601560133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943976 5'
							601690133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943976 5'
8091	22057	35482	3.38	8.0E-08	AI762387.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
8091	22057	35483	3.38	8.0E-08	AI752387.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
8385	22812	36377	2.8	8.0E-08	AW970693.1	EST_HUMAN	EST382776 MAGE resequences, MAGK Homo sapiens cDNA
10828	23848	37363	0.46	8.0E-08	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
11576	24513		2.63	8.0E-08	AF253417.1	NT	Homo sapiens mitochondrial epoxide hydrolase (EPHX1) gene, complete cds
81	13197	26121	4.07	7.0E-08	Q02367	SWISSPROT	ANKYRIN 1 (ERYTHROCYTE ANKYRIN)
1363	14397	27368	17.17	7.0E-08	X04809.1	NT	Rat mRNA for ribosomal protein L31
3589	16634	28553	0.7	7.0E-08	P16305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
3589	16634	28554	0.7	7.0E-08	P16305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
3949	16989	28904	0.9	7.0E-08	P01606	SWISSPROT	IG KAPPA CHAIN V-J REGION OU
3949	16989	28905	0.9	7.0E-08	P01606	SWISSPROT	IG KAPPA CHAIN V-J REGION OU
11185	24123		2.33	7.0E-08	AI635743.1	EST_HUMAN	cong3.P11.A5 conorm Homo sapiens cDNA 3'
11982	24859	38454	4.32	7.0E-08	U24070.1	NT	Rattus norvegicus Munc13-1 mRNA, complete cds
12839	16634	28553	1.55	7.0E-08	P16305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
12839	16634	28554	1.56	7.0E-08	P16305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
12978	25341		1.9	7.0E-08	AJ131016.1	NT	Homo sapiens SCL gene locus
818	13876	26824	4.23	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
818	13876	26825	4.23	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
2371	16379	28403	2.72	6.0E-08	BE144398.1	EST_HUMAN	MRO-HT0168-191169-004-g09 HT0168 Homo sapiens cDNA
4278	17305	30184	1.28	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
							Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase
8162	21100	34499	0.49	8.0E-08	L44140.1	NT	(G6PD) gene, complete cds's
8283	21252		0.74	6.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9883	22636		0.54	6.0E-08	AA827075.1	EST_HUMAN	ab5605.s1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1335368 3' similar to contains MER12.b3 MER12 repetitive element ;
11744	24629	38208	1.91	6.0E-08	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
85	13201	26125	3.22	5.0E-08	AL183303.2	NT	Homo sapiens chromosome 21 segment HS21G103 rh03b09.s1 NC1_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943193 similar to contains Alu repetitive element;
2245	15259	28286	1.95	5.0E-08	AA493851.1	EST_HUMAN	
12185	25032		10.16	5.0E-08	P06981	SWISSPROT	COMPLEMENT C2 PRECURSOR (C3/C5 CONVERTASE)
12382	25182	31814	1.63	5.0E-08	AW851878.1	EST_HUMAN	QV0-CT0225-131089-034-e12 CT0225 Homo sapiens cDNA
1775	14804	27789	1.07	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLOID PROTEIN PRECURSOR
1775	14804	27790	1.07	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLOID PROTEIN PRECURSOR
3077	16134		0.95	4.0E-08	AI078417.1	EST_HUMAN	ca05e02.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1674458 3' similar to contains Alu repetitive element;
3034	16974	29888	0.76	4.0E-08	U82868.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
6545	19806	32898	0.91	4.0E-08	P62824	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
9150	22116	35542	0.6	4.0E-08	O15393	SWISSPROT	TRANSMEMBRANE PROTEASE, SERINE 2
9494	22458	35898	1.32	4.0E-08	L42571.1	NT	Orctulus griseus ribosomal transcription factor (UBF2) mRNA, complete cds
10003	22830		0.82	4.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
10693	23619		0.65	4.0E-08	AI016342.1	EST_HUMAN	ca22410.x1 Soares_fetal_fetus_Nb2H18_9w Homo sapiens cDNA clone IMAGE:1622803 3' repetitive element;contains element MER22 repetitive element ;
10762	23674	37171	3.67	4.0E-08	AI050027.1	EST_HUMAN	an22410.x1 Gesseler Wilms tumor Homo sapiens cDNA clone IMAGE:1699411 3' similar to contains Alu repetitive element;contains element MER22 repetitive element ;
11411	24355	37889	1.51	4.0E-08	AA393927.1	EST_HUMAN	z178b08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728247 5' similar to TR:G505579
11411	24355	37890	1.51	4.0E-08	AA393927.1	EST_HUMAN	G505579 NA/CA,K-EXCHANGER ;
11426	24370	37907	3.11	4.0E-08	BF682493.1	EST_HUMAN	602248024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
11426	24370	37908	3.11	4.0E-08	BF682493.1	EST_HUMAN	602248024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
12190	25807		4.96	4.0E-08	W78159.1	EST_HUMAN	z165q03.r1 Soares_fetal_heart_NbH10W Homo sapiens cDNA clone IMAGE:345558 5' similar to contains L1.1 L1 repetitive element ;
12830	26448		1.84	4.0E-08	AI343353.1	EST_HUMAN	ts55a11.x1 NC1_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2062078 3' similar to contains MER18.b3
3438	16485	29404	0.94	3.0E-08	M63242.1	NT	MER18 MER18 repetitive element ; Macaca fascicularis apolipoprotein A-1 gene, complete cds
5892	18787	31858	3.06	3.0E-08	BE018348.1	EST_HUMAN	bb78a10.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048570 5' similar to TR:Q9Z158 Q9Z158 SYNTAXIN 17. ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7168	18388	31245	4.23	3.0E-08	AI792737.1	EST_HUMAN	q876f1.1 y5 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:1944045 5'
7787	20740	34113	1.41	3.0E-08	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8025	20962		3.85	3.0E-08	AI436352.1	EST_HUMAN	tt83f09.x1 Scores_NSF_F8_8W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126273 3' similar to TR:Q13537 Q13637 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
10258	23183		0.57	3.0E-08	AF056068.1	NT	Homo sapiens MHC class I region
12157	25013		2.78	3.0E-08	R18420.1	EST_HUMAN	y802f04.1 Scores Infant brain 1N1B Homo sapiens cDNA clone IMAGE:30948 5' similar to contains Alu repetitive element
207	19308		10.64	2.0E-08	AW302886.1	EST_HUMAN	xt87f08.x1 NCL_CGAP_L1228 Homo sapiens cDNA clone IMAGE:2767139 3'
230	13330		8.83	2.0E-08	AA425598.1	EST_HUMAN	z4w4807.1 Scores_total_fetus_Nb24F8_8W Homo sapiens cDNA clone IMAGE:773317 5' similar to contains Alu repetitive element; contains element MER15 repetitive element ;
497	13569	28492	1.3	2.0E-08	AF168349.1	NT	Gallus gallus Dact2 protein (Dact2) mRNA, complete cds
661	13727	28651	9.73	2.0E-08	AW886436.1	EST_HUMAN	MRO-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
681	13727	28652	9.73	2.0E-08	AW886436.1	EST_HUMAN	MRO-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
692	14044		17	2.0E-08	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3136893 5'
1346	14381	27350	1.83	2.0E-08	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
1765	14784		1.87	2.0E-08	BE734871.1	EST_HUMAN	601570463F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3846189 5'
1872	14887		3.57	2.0E-08	AW270271.1	EST_HUMAN	xp43f11.x1 NCL_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743149 3'
2550	15552		1.7	2.0E-08	K00216.1	NT	Sheep His-4RNA-GUG
3221	16276	29200	8.15	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3221	16276	29201	8.15	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3873	16812		1.62	2.0E-08	AW813620.1	EST_HUMAN	RC3-ST0197-161099-012-b03 ST0197 Homo sapiens cDNA
4104	17138	30033	0.68	2.0E-08	U82668.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
4434	17461		1.2	2.0E-08	AA458040.1	EST_HUMAN	aa28cd07.1 NCL_CGAP_GC81 Homo sapiens cDNA clone IMAGE:814380 5' similar to contains L1.12 L1 repetitive element ;
4994	18009		2.97	2.0E-08	AW572881.1	EST_HUMAN	he17f08.x2 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2916327 3' similar to contains Alu repetitive element
5719	18813	31882	1.25	2.0E-08	AA613204.1	EST_HUMAN	ai80h11.1 Scores_testis_NIT Homo sapiens cDNA clone 1377189 3'
5932	19018	32213	0.89	2.0E-08	AW088924.1	EST_HUMAN	xt83cd04.x1 NCL_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2595462 3' similar to contains MER18.63 MER18 MER18 repetitive element ;
8337	21308	34721	1.88	2.0E-08	P10272	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE ; REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
8447	21416	34828	1.47	2.0E-08	AA490121.1	EST_HUMAN	ab02g06.s1 Strabagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:839674 3'
9440	22404		0.77	2.0E-08	AU138978.1	EST_HUMAN	AU138978 PLACE1 Homo sapiens cDNA clone PLACE1011719 5'

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10886	23806	37310	0.8	2.0E-08	N78097.1	EST_HUMAN	y7202.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to cortactin LTR1.b3 LTR1 repetitive element :
10886	23806	37311	0.8	2.0E-08	N78097.1	EST_HUMAN	y7202.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to cortactin LTR1.b3 LTR1 repetitive element :
12472	25221		1.88	2.0E-08	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
12882	25953		1.4	2.0E-08	11431676	NT	Homo sapiens hypodermal protein FLJ11342 (FLJ11342), mRNA
1510	15870	27513	1.42	1.0E-08	P31792	SWISSPROT	POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
1780	14819	27804	2.12	1.0E-08	AF125348.1	NT	Homo sapiens caveolin 1 (CAV1) gene, exon 3 and partial cds
2067	15084		2.48	1.0E-08	BE141958.1	EST_HUMAN	PM2-HT0130-150989-001-f12 HT0130 Homo sapiens cDNA
							TCBAP-1D5232 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP5232
3208	16281	29181	1.19	1.0E-08	BE246844.1	EST_HUMAN	TCBAP-1D5232 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP5232
3208	16281	29182	1.19	1.0E-08	BE246844.1	EST_HUMAN	sapiens cDNA clone TCBAP5232
5680	18775	31947	4.5	1.0E-08	AJ010770.1	NT	Homo sapiens hyperin gene, exons 1-50
8046	20883	34380	0.98	1.0E-08	P19474	SWISSPROT	52 KD RO PROTEIN (SJOEREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A))
8369	21338	34749	0.47	1.0E-08	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
							Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
8466	21435	34852	0.56	1.0E-08	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
8466	21435	34853	0.56	1.0E-08	AF224689.1	NT	(UBE2D3) genes, complete cds
8882	21859	35280	1.89	1.0E-08	AI015304.1	EST_HUMAN	cc35a05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1618796 3'
9559	22521		0.46	1.0E-08	P08593	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
9560	22522	35970	0.88	1.0E-08	BE072572.1	EST_HUMAN	PM2-BT0546-210100-004-002 BT0546 Homo sapiens cDNA
							TRICARBOXYLATE TRANSPORT PROTEIN PRECURSOR (CITRATE TRANSPORT PROTEIN) (CTP)
10325	23249	36728	0.81	1.0E-08	P79110	SWISSPROT	(TRICARBOXYLATE CARRIER PROTEIN)
10821	23841	37357	0.87	1.0E-08	P88063	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
11644	24581	38149	3.4	1.0E-08	AF044083.1	NT	Homo sapiens major histocompatibility locus class III region
12128	24698	38602	1.5	1.0E-08	P28315	SWISSPROT	RIBONUCLEASE INHIBITOR
12128	24698	38603	1.5	1.0E-08	P28315	SWISSPROT	RIBONUCLEASE INHIBITOR
12568	25281		3.12	1.0E-08	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
12940	25520		1.68	1.0E-08	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
4271	17300	30179	4.15	9.0E-08	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C078
4271	17300	30180	4.15	9.0E-08	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C078
10422	23344		0.53	9.0E-08	T87950.1	EST_HUMAN	ye58a12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121918 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6828	19888		1.59	8.0E-09	AI270615.1	EST_HUMAN	qu88c11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:1978984 3' similar to contains L1.13 L1 repetitive element;
7479	20445	33801	7.91	8.0E-09	AI183500.1	EST_HUMAN	q442s07.x1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1732164 3' similar to contains MSR1.11 MSR1 repetitive element;
8333	21302	34719	3.04	8.0E-09	AW900159.1	EST_HUMAN	CMO-NN1004-100300-273-608 NN1004 Homo sapiens cDNA
8340	22305		2.64	8.0E-09	AA939882.1	EST_HUMAN	qp74408.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1582576 3'
3621	16864		1.91	7.0E-09	D98842.1	NT	Homo sapiens DNA for 3-ketocacyl-CoA thiolase beta-subunit of mitochondrial trifunctional protein, exon 2, 3
4034	17072		1.22	7.0E-09	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
8234	21203		0.56	7.0E-09	BF108755.1	EST_HUMAN	745610.x1 Soares_NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER28.b2 MER28 repetitive element;
8382	21351		0.91	7.0E-09	AA256200.1	EST_HUMAN	zr80c05.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:681982 5' similar to contains L1.12 L1 repetitive element;
9615	22559	36008	3.06	7.0E-09	L09709.1	NT	Human lysosomal membrane glycoprotein-2 (LAMP2) gene, 5' end and flanking region
10543	23465	36860	1.17	7.0E-09	BE254850.1	EST_HUMAN	601111173F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3351834 5'
10711	23633		0.59	7.0E-09	AA058828.1	EST_HUMAN	zf59e07.s1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:381156 3' similar to contains L1.12 L1 repetitive element;
11032	23896		3.65	7.0E-09	T87860.1	EST_HUMAN	ye59a12.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121918 3'
2162	15178		0.98	6.0E-09	AL040439.1	EST_HUMAN	DKFZp494C0514.1_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp494C0514 5'
4059	17086	28980	0.98	6.0E-09	AA557940.1	EST_HUMAN	nt17a11.s1 NCI_CGAP_HSC1 Homo sapiens cDNA clone IMAGE:1040824 similar to contains L1.12 L1 repetitive element;
5017	18031	30917	5.44	6.0E-09	BE169421.1	EST_HUMAN	PM1-HT0527-180200-001-h05 HT0527 Homo sapiens cDNA
5454	18558	31467	9.55	6.0E-09	AW196784.1	EST_HUMAN	xt85h08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2701311 3'
5922	21888	35315	0.88	6.0E-09	BE161653.1	EST_HUMAN	MF3-HT0448-260300-201-h12 HT0448 Homo sapiens cDNA
9531	22494	35942	2.12	6.0E-09	4503710	NT	Homo sapiens fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3) mRNA
10639	23561		4.42	6.0E-09	AF200823.2	NT	Homo sapiens testis-specific kinase substrate (TSKS) gene, complete cds
1413	14446	27418	4.43	5.0E-09	BE149284.1	EST_HUMAN	RC2-HT0252-120200-014-h10 HT0252 Homo sapiens cDNA
1870	14895	27894	1.02	5.0E-09	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
6550	19611	32872	2.31	5.0E-09	AA359454.1	EST_HUMAN	EST06748 Fetal lung II Homo sapiens cDNA 5' end
7025	18357	31277	0.59	5.0E-09	U66059.1	NT	Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV9S1A1T, TCRBV7S1A1N2T, TCRBV5S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2FT, TCRBV7S2A1N4T, TCRBV13S9/13S>

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8032	21808	36328	0.5	5.0E-09	P37071	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN COR6
10455	23377	36870	2.63	6.0E-09	AW799867.1	EST_HUMAN	PM2-UM0053-240300-005-c09 UM0053 Homo sapiens cDNA
522	13593		1.81	4.0E-09	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
886	14018		2.79	4.0E-09	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1465	14498	27472	2.79	4.0E-09	9558718	NT	Homo sapiens hypodermal protein (AF038169), mRNA
2038	15057	28075	1.63	4.0E-09	AF175325.1	NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
2038	15057	28076	1.63	4.0E-09	AF175325.1	NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
2436	15443	28461	2.87	4.0E-09	AA350878.1	EST_HUMAN	EST58385 Infant brain Homo sapiens cDNA 5' end similar to similar to heat shock protein, 80 kDa
8179	21149	34556	0.66	4.0E-09	AA495747.1	EST_HUMAN	zW04c06.r1 Soares_NHTMPF_S1 Homo sapiens cDNA clone IMAGE:788298 5'
8867	21834	35255	0.66	4.0E-09	T84942.1	EST_HUMAN	yc11a07.s1 Soares_fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:56804 3'
							hu09a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
2359	15387	28389	4.28	3.0E-09	BE222239.1	EST_HUMAN	MER18 repetitive element;
2560	15581	28579	1.39	3.0E-09	BE222239.1	EST_HUMAN	hu09a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
2669	15656	28674	1.03	3.0E-09	P23249	SWISSPROT	MER18 repetitive element;
							PROTEIN MOV-10
3940	16391	29312	1.15	3.0E-09	BE222239.1	EST_HUMAN	hu09a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
3988	16437		0.79	3.0E-09	AA442272.1	EST_HUMAN	MER18 repetitive element;
4124	17157		0.68	3.0E-09	X16674.1	NT	zW04a04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757422 5'
4457	17483	30371	3.77	3.0E-09	AF175325.1	NT	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
4540	17563	30450	3.44	3.0E-09	Q9Y3R5	SWISSPROT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
							258.1 KDA PROTEIN C21ORF5 (KIA0833)
5225	18233		0.99	3.0E-09	D88842.1	NT	Homo sapiens DNA for 3-ketoadyl-CoA thiolese beta-subunit of mitochondrial trifunctional protein, exon 2, 3
8232	21201	34607	1.08	3.0E-09	BE465780.1	EST_HUMAN	hu09a02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3194090 3' similar to TR:O55091
10809	23531	37026	1.84	3.0E-09	AL163247.2	NT	O55091 IMPACT PROTEIN.;
11361	24310	37836	3.08	3.0E-09	BF108943.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
11361	24310	37837	3.06	3.0E-09	BF108943.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
813	13871		10.84	2.0E-09	X16674.1	NT	7772c08.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
1263	14298	27261	5.84	2.0E-09	AL163284.2	NT	7772c08.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
1697	14699		9.53	2.0E-09	AL118573.1	EST_HUMAN	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
2334	15345	28366	2.58	2.0E-09	Q9Y3R5	SWISSPROT	Homo sapiens chromosome 21 segment HS21C084
3958	16908	28613	3.67	2.0E-09	O60241	SWISSPROT	DKFZp761B1710.1 761 (synonym: harny2) Homo sapiens cDNA clone DKFZp761B1710 5'
4039	17077	28677	1.65	2.0E-09	AL283479.1	EST_HUMAN	258.1 KDA PROTEIN C21ORF5 (KIA0833)
							BRAIN-SPECIFIC ANGIOGENESIS INHIBITOR 2 PRECURSOR
							q107d09.x1 Soares_NHTMPF_S1 Homo sapiens cDNA clone IMAGE:1855793 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5198	18207	31081	0.68	2.0E-09	M23161.1	NT	Human transposon-like element mRNA
5808	18688	32081	0.69	2.0E-09	AJ004062.1	EST_HUMAN	cd47b09.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1619897 3'
6273	18346		0.65	2.0E-09	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
6947	20171		0.8	2.0E-09	AA357407.1	EST_HUMAN	EST68142 Kibbey IX Homo sapiens cDNA 5' and similar to EST containing L1 repeat
7684	20642	34008	7.6	2.0E-09	AA461430.1	EST_HUMAN	z63h06.r1 Soares_testis_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:786187 5' similar to contains Alu repetitive element;
7768	20719	34082	0.63	2.0E-09	W28634.1	EST_HUMAN	52d111 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8128	21063	34461	0.82	2.0E-09	AW862126.1	EST_HUMAN	MR1-CT0352-240200-105-b06 CT0352 Homo sapiens cDNA
9082	22028	35452	2.25	2.0E-09	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12705	13871		22.38	2.0E-09	X16874.1	NT	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
12772	25975		1.67	2.0E-09	AA288070.1	EST_HUMAN	nc110d2.r1 NCL_CGAP_Prl Homo sapiens cDNA clone IMAGE:1007810 similar to contains Alu repetitive element;
12778	25829		1.47	2.0E-09	AW301637.1	EST_HUMAN	xt68a02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2768234 3'
12913	25492		1.98	2.0E-09	U82688.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
1111	14155	27105	1.1	1.0E-09	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
1111	14155	27108	1.1	1.0E-09	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
1638	14670		0.91	1.0E-09	AJ28041.1	NT	Homo sapiens 859 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
2510	15513		1.16	1.0E-09	AJ356086.1	EST_HUMAN	qy64e11.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2016812 3' similar to contains MER12.12
2800	15959	28878	1.83	1.0E-09	U80017.1	NT	MER12 repetitive element;
2837	15895	28915	4.07	1.0E-09	M28699.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
2837	15995	28916	4.07	1.0E-09	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
3051	16108	28022	0.89	1.0E-09	BE635440.1	EST_HUMAN	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
4836	17853		5.63	1.0E-09	AA719287.1	EST_HUMAN	601058802F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3445177 5'
5162	18171	31050	0.84	1.0E-09	T60216.1	EST_HUMAN	z136b03.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:414029 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
5581	18677	31640	0.82	1.0E-09	AL163283.2	NT	Alu repetitive element; contains MER28 repetitive element;
5830	19016	32211	1.35	1.0E-09	U07000.1	NT	Homo sapiens chromosome 21 segment HS21C083
6267	18340	32572	3.11	1.0E-09	P28694	SWISSPROT	Human breakpoint cluster region (BCR) gene, complete cds
8113	21050	34449	0.63	1.0E-09	AV728845.1	EST_HUMAN	CIRCUMSPOROITE PROTEIN PRECURSOR (CS)
8733	21701	35127	0.87	1.0E-09	AJ688474.1	EST_HUMAN	AV728845 HTC Homo sapiens cDNA clone HTCC1G07 5'
							wc39b05.x1 Soares_NFL_T_GBC_31 Homo sapiens cDNA clone IMAGE:2330491 3' similar to contains MER25.11 MER25 repetitive element;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10677	23599		2.87	1.0E-09	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12081	24963		1.53	1.0E-09	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12618	25916	31425	2.01	1.0E-09	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
12781	25418		1.6	1.0E-09	T83176.1	EST_HUMAN	ye24e05.1 Strabegene lung (#637210) Homo sapiens cDNA clone IMAGE:118888 5'
1312	14348	27314	2.49	9.0E-10	AW987740.1	EST_HUMAN	MF0-SN0040-050500-002-c07 SN0040 Homo sapiens cDNA
2845	15905	28830	6.84	9.0E-10	AI870071.1	EST_HUMAN	we78f03.x1 Soares Dieckgraebe colon_NHCO Homo sapiens cDNA clone IMAGE:2347253 3' similar to SW:RL29_HUMAN P47914 60S RIBOSOMAL PROTEIN L29 ;contains element PTR5 repetitive element ;
7008	20134	33449	4.22	9.0E-10	AI452982.1	EST_HUMAN	TR:O00372 O00372 PUTATIVE P160. ;
148	13251	28180	12.13	8.0E-10	U63630.2	NT	Homo sapiens MCM4 (MCM4) and DNA-PKcs (PRKDC) genes, partial cds
3353	16404	29325	0.76	8.0E-10	BE080748.1	EST_HUMAN	QV1-BT0631-150200-071-601 BT0631 Homo sapiens cDNA
4229	17288	30142	3.89	8.0E-10	AA376832.1	EST_HUMAN	EST186864 Small intestine 1 Homo sapiens cDNA 5' end
10324	23248		2.46	8.0E-10	U36308.2	NT	Homo sapiens lens major intrinsic protein (MIP) gene, complete cds
702	13784	26898	32.88	7.0E-10	7706225	NT	Homo sapiens TPA inducible protein (LOC51586), mRNA
702	13784	26899	32.88	7.0E-10	7706225	NT	Homo sapiens TPA inducible protein (LOC51586), mRNA
1628	14659	27636	2.48	7.0E-10	Q13342	SWISSPROT	LYSP100 PROTEIN (LYMPHOID-RESTRICTED HOMOLOG OF SP100)
2566	15567		21.84	7.0E-10	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
3104	16161	29072	2.88	7.0E-10	X00853.1	NT	H. sapiens DHFR gene, exon 3
6309	19380	32619	3.72	7.0E-10	AA345220.1	EST_HUMAN	EST51247 Gall bladder II Homo sapiens cDNA 5' and
7647	20607	33973	1.2	7.0E-10	BF352883.1	EST_HUMAN	IL3-HT0619-110700-209-D12 HT0619 Homo sapiens cDNA
7918	20881		1.46	7.0E-10	P35084	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT
8308	21277	34688	1.29	7.0E-10	AF029701.2	NT	Homo sapiens presenilin-1 gene, exons 1 and 2
8308	21277	34689	1.29	7.0E-10	AF029701.2	NT	Homo sapiens presenilin-1 gene, exons 1 and 2
10673	23595	37092	0.68	7.0E-10	L08895.1	NT	Homo sapiens MAD5/MEF2-family transcription factor (MEF2C) mRNA, complete cds
914	13989	28922	2.67	6.0E-10	AJ400877.1	NT	Homo sapiens ASCLS3 gene, CEC3P1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
2686	15682	28700	1.37	6.0E-10	A142405.1	EST_HUMAN	RC3-GT0254-031099-012-g12 CT0254 Homo sapiens cDNA
4798	17788		2.72	6.0E-10	AW663719.1	EST_HUMAN	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1)
9135	22101	35527	0.89	6.0E-10	P33730	SWISSPROT	(LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)
9135	22101	35528	0.89	6.0E-10	P33730	SWISSPROT	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1)
6892	22919	36386	0.43	6.0E-10	P98073	SWISSPROT	(LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12221	25058		1.64	6.0E-10	AW971823.1	EST_HUMAN	EST384012 IMAGE resequences, MAGL Homo sapiens cDNA
761	13821		5.01	5.0E-10	AL046804.1	EST_HUMAN	DKFZp434N219.1 434 (synonym: Hhes3) Homo sapiens cDNA clone DKFZp434N219 5'
3489	16535	29460	1.63	5.0E-10	Q01033	SWISSPROT	HYPOTHETICAL GENE 48 PROTEIN
5026	18040	30823	1.1	5.0E-10	AF181897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
7544	20507		1.74	5.0E-10	BF105159.1	EST_HUMAN	601822184F1 NIH_MGC_76 Homo sapiens cDNA clone IMAGE:4042413 5'
8894	22847	36303	1.96	5.0E-10	P34678	SWISSPROT	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III
8894	22847	36304	1.96	5.0E-10	P34678	SWISSPROT	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III
111	13222		1.27	4.0E-10	AJ221083.1	EST_HUMAN	q008009.x1 Soares placenta_80c9weeks_2NthIP80c9W Homo sapiens cDNA clone IMAGE:1768046 3'
563	13651	26565	0.75	4.0E-10	AA515280.1	EST_HUMAN	similar to contains LTR8.12 L TR8 repetitive element:
2012	15033	28043	1.4	4.0E-10	AW594709.1	EST_HUMAN	nfe4a01.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:924848 3'
2580	15581	28600	5.49	4.0E-10	AL163303.2	NT	hg58g03.x1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2949844 3' similar to contains Alu repetitive element:
7382	20352	33703	17.71	4.0E-10	AF224669.1	NT	Homo sapiens chromosome 21 segment HS21C103
10555	23477	36971	0.53	4.0E-10	AW293243.1	EST_HUMAN	(UBE2D3) genes, complete cds
10812	23733	37235	0.87	4.0E-10	AL267342.1	EST_HUMAN	UH-B12-eh-e-07-Q-U1.s1 NCL_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727081 3'
10933	23953	37368	0.45	4.0E-10	BE168208.1	EST_HUMAN	eq63h11.x1 Stanley Frontal SN pod 2 Homo sapiens cDNA clone IMAGE:2035653
10933	23953	37369	0.45	4.0E-10	BE168208.1	EST_HUMAN	PM1-HT0521-120200-001-408 HT0521 Homo sapiens cDNA
916	13970	26824	1.8	3.0E-10	N38113.1	EST_HUMAN	PM1-HT0521-120200-001-408 HT0521 Homo sapiens cDNA
1353	14388		4.8	3.0E-10	AY005150.1	NT	YK2206.s1 Soares melanocyte 2NthIM Homo sapiens cDNA clone IMAGE:272863 3' similar to contains L1.11 L1 repetitive element:
4566	17589	30480	1.04	3.0E-10	AL163203.2	NT	Homo sapiens extracellular glycoprotein lactin precursor, gene, complete cds
4566	17589	30481	1.04	3.0E-10	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
5630	18628	31564	1.06	3.0E-10	N50109.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
6327	18397	32639	4.03	3.0E-10	P20350	SWISSPROT	yt21g08.s1 Soares multiple sclerosis_2NthIMSP Homo sapiens cDNA clone IMAGE:282782 3'
6486	18551	32801	3.08	3.0E-10	BE302870.1	EST_HUMAN	RHOMBROID PROTEIN (VEINLET PROTEIN)
8036	20973	34367	1.42	3.0E-10	AV743302.1	EST_HUMAN	ba76d08.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2808319 5'
8036	20973	34368	1.42	3.0E-10	AV743302.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone C8FBGD08 5'
8082	22048	35471	1.04	3.0E-10	H87208.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone C8FBGD08 5'
9404	22369	35803	1.8	3.0E-10	AW850731.1	EST_HUMAN	ys74b12.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:220511 3' similar to contains MER29 repetitive element:
9404	22369	35804	1.8	3.0E-10	AW850731.1	EST_HUMAN	IL3-CT0219-160200-064-B08 CT0219 Homo sapiens cDNA
						EST_HUMAN	IL3-CT0219-160200-064-B08 CT0219 Homo sapiens cDNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon EQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9696	22849		0.73	3.0E-10	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphatase hydrolase (FHT) gene, exon 5
10828	23749		2.05	3.0E-10	T65891.1	EST_HUMAN	yc11612J1 Stratigene lung (#637210) Homo sapiens cDNA clone IMAGE:80398 5'
10957	23877		1.76	3.0E-10	AA768294.1	EST_HUMAN	nz36903.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1289908 3'
12865	25468	31728	1.95	3.0E-10	BE178517.1	EST_HUMAN	IL3-HT0818-110500-138-E07 HT0818 Homo sapiens cDNA
37	13157	28058	1.55	2.0E-10	P48888	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
37	13157	28058	1.65	2.0E-10	P48888	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
1913	14937		1.88	2.0E-10	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (htf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
2899	16057		0.68	2.0E-10	BF675047.1	EST_HUMAN	602136640F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4273377 5'
5901	18986		3.12	2.0E-10	Q28640	SWISSPROT	(HPRG)
6378	19447	32686	1.55	2.0E-10	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
7605	20566	33926	6.24	2.0E-10	BE781082.1	EST_HUMAN	601586208F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3940824 5'
8347	21316	34730	0.54	2.0E-10	P28809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
8347	21316	34731	0.54	2.0E-10	P28809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
9657	22600		0.85	2.0E-10	BF434565.1	EST_HUMAN	7c78408.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3842303 3' similar to contains L1.13 L1 repetitive element
1509	14542		2.94	1.0E-10	AW957767.1	EST_HUMAN	MRO-SN0038-280300-001-01 SN0038 Homo sapiens cDNA
1611	14643	27619	3.27	1.0E-10	AV652123.1	EST_HUMAN	AV652123 GLC Homo sapiens cDNA clone GLCCXA11 3'
2586	15587		1.92	1.0E-10	AW652001.1	EST_HUMAN	QV0-CT0225-191189-058-008 CT0225 Homo sapiens cDNA
3511	16557	29481	0.84	1.0E-10	AW832912.1	EST_HUMAN	QV2-TT0003-161189-013-g10 TT0003 Homo sapiens cDNA
3550	16596		0.81	1.0E-10	AL041685.1	EST_HUMAN	DKFZp434N1317_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N1317 5'
3858	16598		0.94	1.0E-10	AL041685.1	EST_HUMAN	DKFZp434N1317_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N1317 5'
4043	17081		6.46	1.0E-10	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
4154	17185	30072	5.55	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase 1 (CAMK1), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4154	17185	30073	5.55	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase 1 (CAMK1), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4160	17191	30080	2.48	1.0E-10	AB031059.1	NT	Homo sapiens PCCX1 mRNA for protein containing CXXC domain 1, complete cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4199	17230		2.63	1.0E-10	M30629.1	NT	Human pregnancy-specific glycoprotein beta-1 (SP1) mRNA, last exon
5212	18221		0.82	1.0E-10	AI797745.1	EST_HUMAN	we8204.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347615 3' similar to contains
6875	19928	33225	0.61	1.0E-10	AA631233.1	EST_HUMAN	MER31.11 MER31 repetitive element;
6891	20214	33543	0.49	1.0E-10	AF003528.1	NT	ng81a05.s1 NCI CGAP Co8 Homo sapiens cDNA clone IMAGE:1158704 3'
7716	20673		0.58	1.0E-10	P08548	SWISSPROT	Homo sapiens X-linked arylidase ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7847	20888	34279	0.63	1.0E-10	AU128594.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
9582	21550	34988	1.11	1.0E-10	AW408990.1	EST_HUMAN	AU128594 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'
9002	21968		1.1	1.0E-10	AL288340.1	EST_HUMAN	fb_844 Fetal brain library Homo sapiens cDNA
10562	23484		3.95	1.0E-10	AA081888.1	EST_HUMAN	qnr04e10.x1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1880874 3' similar to contains L1.t1 L1 repetitive element;
11259	24211	37734	3.25	1.0E-10	A1038280.1	EST_HUMAN	zr23g08.r1 Strabagene neuroepithelium NT2RAM 937234 Homo sapiens cDNA clone IMAGE:548314 5'
12166	18354		2.46	1.0E-10	X87344.1	NT	oy65r03.x1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1672881 3'
261	13357	26282	0.98	9.0E-11	BE145600.1	EST_HUMAN	H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
2114	15131	28161	6.21	9.0E-11	AL134395.1	EST_HUMAN	IL2-HT0203-291099-018-c08 HT0203 Homo sapiens cDNA
2114	15131	28152	6.21	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
3394	16443	29370	2.6	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
3394	16443	29371	2.6	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
4528	17552	30440	0.72	9.0E-11	AA775985.1	EST_HUMAN	ae78f01.s1 Strabagene echizo brain S11 Homo sapiens cDNA clone IMAGE:970297 3'
5654	18750		3.89	9.0E-11	BE079780.1	EST_HUMAN	RO8-BT0627-140200-011-E08 BT0627 Homo sapiens cDNA
10514	23436	36834	1.22	9.0E-11	AA324980.1	EST_HUMAN	EST127872 Cerebellum II Homo sapiens cDNA 5' end
10514	23436	36835	1.22	9.0E-11	AA324980.1	EST_HUMAN	EST127872 Cerebellum II Homo sapiens cDNA 5' end
12546	25269	31809	4.59	9.0E-11	C16835.1	EST_HUMAN	C16835 Clontech human aorta polyA+ mRNA (#8572) Homo sapiens cDNA clone GEN-508B08 5'
3133	16190		8.85	8.0E-11	H10971.1	EST_HUMAN	yn53f11.s1 Scores adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:172173 3' similar to contains L1 repetitive element;
4073	17109	30003	4.35	8.0E-11	N23712.1	EST_HUMAN	yn46g08.s1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:265298 3'
5890	18978	32170	0.65	8.0E-11	AW674316.1	EST_HUMAN	ba60g04.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800982 3'
6829	19883		0.65	8.0E-11	AW100158.1	EST_HUMAN	xf45h11.x1 NCI CGAP_Bim50 Homo sapiens cDNA clone IMAGE:2621061 3' similar to contains MER10.11
1442	14475	27452	1.87	7.0E-11	AA330642.1	EST_HUMAN	MER10 repetitive element;
						EST_HUMAN	EST134392 Embryo, 6 week 1 Homo sapiens cDNA 5' end

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3685	16925	28634	1.11	7.0E-11	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
8843	21810	35228	2.79	7.0E-11	AF163884.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
10560	23512		1.19	7.0E-11	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
412	13485	28421	0.97	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
412	13485	28422	0.97	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
6884	19936	33232	0.86	6.0E-11	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds's
7957	20896	34291	3.22	6.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8707	21675	35100	7.37	6.0E-11	AV727859.1	EST_HUMAN	AV727859 HTC Homo sapiens cDNA clone HTCASC08 5'
9668	22621	36072	0.42	6.0E-11	BE063509.1	EST_HUMAN	CvMO-BT0281-031199-087-e03 BT0281 Homo sapiens cDNA
12	13132	26030	0.76	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C063
3377	13132	26030	1.31	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C063
4256	17265	30167	1.51	5.0E-11	P48034	SWISSPROT	ALDEHYDE OXIDASE
6885	19722	32987	1.91	5.0E-11	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
7774	20727	34096	11.91	5.0E-11	11416789	NT	Homo sapiens protocadherin beta 3 (PCDH13), mRNA
1401	14434		1.86	4.0E-11	AA436042.1	EST_HUMAN	zuo1b12.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730559 5'
2802	15794	28812	7.63	4.0E-11	BE885900.1	EST_HUMAN	601607631FT NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908286 5'
2881	16039	28962	0.92	4.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4849	17670	30557	1.24	4.0E-11	D44686.1	EST_HUMAN	HUMSUPY069 Human brain cDNA Homo sapiens cDNA clone 069
6021	19679	32957	3.27	4.0E-11	P20095	SWISSPROT	PRE-MRNA SPLICING FACTOR RNA HELICASE PRP2
7197	20221	33552	0.54	4.0E-11	AA442830.1	EST_HUMAN	z559f10.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757963 5' similar to TR:G1056260
7600	20561		3.97	4.0E-11	AF224689.1	NT	G1056260 PHEROMONE RECEPTOR VN4 ;
9750	22691		1.88	4.0E-11	BE149425.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
10020	22947	36415	0.86	4.0E-11	AI609763.1	EST_HUMAN	RCT1-HT0256-210100-013-f08 HT0256 Homo sapiens cDNA
12736	25388	31752	1.56	4.0E-11	11545732	NT	182g12.x1 NC1_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2105830 3' similar to WP:ZK363.1
1488	14521	27494	2.55	3.0E-11	6670077	NT	CE00385 ;
4305	17334		1.37	3.0E-11	AA309248.1	EST_HUMAN	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
961	14014	28987	1.48	2.0E-11	AI150502.1	EST_HUMAN	Mus musculus expressed in non-metastatic cells 2, protein (NM23B) (Nme2), mRNA
							EST180120 Liver, hepatocellular carcinoma Homo sapiens cDNA 5' end
							qf30a04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752102 3' similar to contains MER10.13
							MER10 repetitive element ;

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1189	14229	27186	4.46	2.0E-11	R24807.1	EST_HUMAN	y943e12.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:36144 5'
1189	14229	27187	4.46	2.0E-11	R24807.1	EST_HUMAN	y943e12.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:36144 5'
1617	14649	27624	5.86	2.0E-11	L17432.1	NT	Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and epsilon receptor-like protein COR3beta (COR3beta) genes, complete cds
1617	14649	27625	5.86	2.0E-11	L17432.1	NT	Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and epsilon receptor-like protein COR3beta (COR3beta) genes, complete cds
1620	14653	27629	1.25	2.0E-11	A1126374.1	EST_HUMAN	q551c10.x1 Soares_pregnant_uterus_NIH-IPU Homo sapiens cDNA clone IMAGE:1713138 3' similar to gb:U02632 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN); contains L1, L1 L1 repetitive element;
2775	15767	28787	1.04	2.0E-11	AF087913.1	NT	Human endogenous retrovirus HERV-P-T47D
3211	16268	29189	8.7	2.0E-11	P10263	SWISSPROT	RETROVIRUS-RELATED GAG POLYPROTEIN (VERSION 1)
3337	16388	29309	1	2.0E-11	A1478617.1	EST_HUMAN	hm54cd9.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2161836 3'
3375	18425	29350	0.71	2.0E-11	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N- ACETYL GALACTOSAMINYLTRANSFERASE) (GALNAc-T1)
3508	18554		1.09	2.0E-11	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
4472	17498		1.24	2.0E-11	BE065537.1	EST_HUMAN	RC3-BT0318-170200-014-c05 BT0318 Homo sapiens cDNA
4636	17657		0.96	2.0E-11	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
4973	17988		2.36	2.0E-11	BE062558.1	EST_HUMAN	QV2-BT0258-281099-014-c01 BT0258 Homo sapiens cDNA
6258	19331	32562	1	2.0E-11	AW877806.1	EST_HUMAN	QV2-PT0073-280300-109-h08 PT0073 Homo sapiens cDNA
6443	19508	32758	1.71	2.0E-11	AA581028.1	EST_HUMAN	nc83h05.1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797433 5' similar to SW:PR16_YEAST
7401	20369	33722	0.82	2.0E-11	BF592945.1	EST_HUMAN	P16938 PRE-MRNA SPLICING FACTOR RNA HELICASE PRP16. ;
8214	21183		0.51	2.0E-11	P37072	SWISSPROT	797c03.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3442565 3'
9678	22540		1.31	2.0E-11	AF029308.1	NT	OLFACTORY RECEPTOR-LIKE PROTEIN COR8
10847	23569	37065	4.42	2.0E-11	Q13608	SWISSPROT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10882	23802	37305	0.85	2.0E-11	AW885874.1	EST_HUMAN	OLFACTORY RECEPTOR 51 (OLFACTORY RECEPTOR-LIKE PROTEIN OLF1)
10882	23802	37306	0.85	2.0E-11	AW885874.1	EST_HUMAN	RC4-OT0072-170400-019-c11 OT0072 Homo sapiens cDNA
11448	24391	37835	1.54	2.0E-11	AA035369.1	EST_HUMAN	RC4-OT0072-170400-019-c11 OT0072 Homo sapiens cDNA
11448	24391	37836	1.54	2.0E-11	AA035369.1	EST_HUMAN	zk27g02.s1 Soares_pregnant_uterus_NIH-IPU Homo sapiens cDNA clone IMAGE:471794 3'
11477	24420	37869	2.14	2.0E-11	AA261956.1	EST_HUMAN	zk27g02.s1 Soares_pregnant_uterus_NIH-IPU Homo sapiens cDNA clone IMAGE:471794 3'
12326	25128		4.12	2.0E-11	AW842143.1	EST_HUMAN	za18b04.1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:685519 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12354	25148	31854	2.14	2.0E-11	BF377859.1	EST_HUMAN	CM2-TN0140-070900-372-g01 TN0140 Homo sapiens cDNA
12617	25313		1.49	2.0E-11	D25217.2	NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
12754	25399		1.68	2.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
13070	25604		3.68	2.0E-11	11417868	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
677	13740	26887	0.83	1.0E-11	AJ131016.1	NT	Homo sapiens SCL gene locus
784	13844	26789	1.89	1.0E-11	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1221	14259	27216	4.68	1.0E-11	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
1498	14531		2.95	1.0E-11	AF118914.1	NT	Homo sapiens PRO3078 mRNA, complete cds
2053	15072	28091	1.41	1.0E-11	P16288	SWISSPROT	OXYSTEROL-BINDING PROTEIN
2136	15153	28108	3.18	1.0E-11	AF000573.1	NT	Homo sapiens homogenitase 1,2-dioxygenase gene, complete cds
2170	15186	28207	1.15	1.0E-11	AA306318.1	EST_HUMAN	EST180186 Liver, hepatocellular carcinoma Homo sapiens cDNA 5' end similar to EST containing Alu repeat
3510	16558	29480	0.8	1.0E-11	BE004315.1	EST_HUMAN	CM0-BN0105-170300-292-d12 BN0105 Homo sapiens cDNA
4890	17975	30896	1.01	1.0E-11	AI168625.1	EST_HUMAN	aa65106.s1 Soares NIH-MP_u S1 Homo sapiens cDNA clone IMAGE:1681243 3'
5405	18508	31385	14.43	1.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
5931	19017	32212	0.77	1.0E-11	BF222846.1	EST_HUMAN	7p57d01.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:3648945 3' similar to contains MER10.b3
8112	21049		0.51	1.0E-11	AB042287.1	NT	MER10 repetitive element:
8543	21511	34928	3.36	1.0E-11	4885546	NT	Homo sapiens P1S gene for 6-pyruvoyltetrahydropterin synthase, complete cds
8928	21894	35322	4.18	1.0E-11	R13174.1	EST_HUMAN	Homo sapiens PHD finger protein 2 (PHF2) mRNA
9403	22368	35801	1.18	1.0E-11	BF366119.1	EST_HUMAN	yf73d08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:28168 5'
9403	22368	35802	1.18	1.0E-11	BF366119.1	EST_HUMAN	QV4-NN1149-250900-423-a03 NN1149 Homo sapiens cDNA
11619	24557	38120	1.48	1.0E-11	BF680078.1	EST_HUMAN	QV4-NN1149-250900-423-a03 NN1149 Homo sapiens cDNA
2963	16021	28948	0.82	9.0E-12	P20742	SWISSPROT	602154807F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4285677 5'
10157	23082	39558	1.02	9.0E-12	AL163300.2	NT	PREGNANCY ZONE PROTEIN PRECURSOR
10157	23082	39559	1.02	9.0E-12	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
12075	24947	38542	2.85	9.0E-12	AL046939.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C100
9593	22846		0.92	8.0E-12	BE074720.1	EST_HUMAN	DKFZp56610417_r1 583 (synonym: tuler1) Homo sapiens cDNA clone DKFZp56610417 5'
12407	25180		3.22	8.0E-12	AJ271738.1	NT	IL5-BT0578-130300-038-G12 BT0578 Homo sapiens cDNA
4690	17711	30605	1.46	7.0E-12	O05904	SWISSPROT	Homo sapiens Xq pseudautosomal region; segment 2/2
11677	24543	38220	7.41	7.0E-12	AA704736.1	EST_HUMAN	34 KD SPICULE MATRIX PROTEIN PRECURSOR (LSM34)
3558	16904		0.95	6.0E-12	AV730554.1	EST_HUMAN	223g01.s1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:451162 3'
4375	17403	30283	9.29	6.0E-12	AA732516.1	EST_HUMAN	AV730554 HTF Homo sapiens cDNA clone HTFAWFO6 5'
							nz88811.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1302573 3' similar to contains Alu repetitive element;

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6528	19691	32851	0.65	6.0E-12	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphatase hydrolase (FHT) gene, exon 5
9347	22312	35736	0.98	6.0E-12	AF003249.1	NT	Morone saxatilis myosin heavy chain FM3A (FM3A) mRNA, complete cds
9829	22878		1.68	6.0E-12	AA947898.1	EST_HUMAN	cd10g11.s1 NCL_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1367588 similar to contains MER28.12
1044	14080	27043	3.57	5.0E-12	T08573.1	EST_HUMAN	MER28 repetitive element;
3401	16450	29376	1.17	5.0E-12	BE047778.1	EST_HUMAN	EST04462 Fetal brain, Strabagene (cat#838206) Homo sapiens cDNA clone HFBDDV33
3740	16782	29694	6.8	5.0E-12	AJ271736.1	NT	tx42b05.y1 NCL_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2281217 5'
6137	19214	32441	4.99	5.0E-12	AL163278.2	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
6137	19214	32442	4.99	5.0E-12	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6839	19697	32973	9.52	5.0E-12	AW974760.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C078
7232	18977	33274	1	5.0E-12	AL040739.1	EST_HUMAN	EST388850 MAGE resequences, MAGN Homo sapiens cDNA
7242	18977	33274	1.03	5.0E-12	AL040739.1	EST_HUMAN	DKFZp434B1615_s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B1615 3'
8571	21639	34960	1.14	5.0E-12	AA033745.1	EST_HUMAN	DKFZp434B1615_s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B1615 3'
9015	21881		0.7	5.0E-12	AW887037.1	EST_HUMAN	z01g12.s1 Scores fetal heart NBHH19W Homo sapiens cDNA clone IMAGE:375718 3' similar to contains
9346	22311		0.54	5.0E-12	AL078591.1	EST_HUMAN	L1.13 L1 repetitive element;
9484	22428	35987	2.78	5.0E-12	AJ271735.1	NT	RC1-OT0086-220300-011-407 OT0088 Homo sapiens cDNA
9778	22719	38173	1.38	5.0E-12	P34982	SWISSPROT	DKFZp434J0428_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434J0428 5'
10638	23560		4.14	5.0E-12	AL163303.2	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
10728	23651	37144	0.91	5.0E-12	AL163302.2	NT	OLFACTORY RECEPTOR 1D2 (OLFACTORY RECEPTOR-LIKE PROTEIN HCMP07E) (OLFACTORY RECEPTOR 17-4) (OR17-4)
244	13342	28267	4.17	4.0E-12	AA700328.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
245	13342	28267	5.51	4.0E-12	AA700326.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C102
4660	17671	30558	0.74	4.0E-12	A1889884.1	EST_HUMAN	z174g11.s1 Scores fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460678 3'
7881	20826		0.72	4.0E-12	BF445140.1	EST_HUMAN	z174g11.s1 Scores fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460678 3'
8686	21563		2.92	4.0E-12	AF106907.1	NT	b22b05.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2270746 3' similar to TR-Q13539 Q13539
9035	22001	35422	0.76	4.0E-12	AB042815.1	NT	MARINER TRANSPOSASE;
11419	24363	37898	3.26	4.0E-12	AJ226043.1	NT	na21b03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3366077 3' similar to contains MER7.b2
12668	26338		2.82	4.0E-12	U78027.1	NT	MER7 repetitive element;
							Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
							Bos taurus Mch2 mRNA for mitochondrial carrier homolog 2, complete cds
							Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
							Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosylase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
618	13683	26600	3.06	3.0E-12	AW341683.1	EST_HUMAN	Ind13d01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2806377 3' similar to TR-O14517 O14517 SMRP.;
618	13683	26601	3.06	3.0E-12	AW341683.1	EST_HUMAN	Ind13d01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2806377 3' similar to TR-O14517 O14517 SMRP.;
5211	18220	31086	0.73	3.0E-12	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
5627	18628	31562	0.96	3.0E-12	AF111108.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
7859	20619		0.54	3.0E-12	AB042297.1	NT	Homo sapiens PTS gene for 6-pyruoylseralhydropterin synthase, complete cds
8030	20967		0.55	3.0E-12	AW854328.1	EST_HUMAN	RC3-CT0255-031089-011-002 CT0255 Homo sapiens cDNA
8718	21896	35114	0.48	3.0E-12	O35453	SWISSPROT	SERINE PROTEASE HEPSIN
9462	22426	36884	0.54	3.0E-12	O35453	SWISSPROT	SERINE PROTEASE HEPSIN
11016	23981	37507	2.71	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
11016	23981	37508	2.71	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
1991	14693	27688	2.41	2.0E-12	AW802131.1	EST_HUMAN	IL5-JM0071-120400-065-a05 UM0071 Homo sapiens cDNA
3480	16526	29451	0.85	2.0E-12	6764496	NT	Mus musculus keratin-associated protein 6.2 (Krtap6-2), mRNA
4141	17172	30080	1.09	2.0E-12	J01884.1	NT	Rat U3A small nuclear RNA
4141	17172	30081	1.09	2.0E-12	J01884.1	NT	Rat U3A small nuclear RNA
4491	17477		1.97	2.0E-12	BE083509.1	EST_HUMAN	CM0-BT0281-031189-087-a03 BT0281 Homo sapiens cDNA
6321	18427	31177	0.71	2.0E-12	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
6822	19880		1.83	2.0E-12	AW971857.1	EST_HUMAN	EST383946 MAGC resequences, MAGL Homo sapiens cDNA
7381	20361	33702	3.22	2.0E-12	T08169.1	EST_HUMAN	EST06080 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBBA13 5' end
7667	20530	33889	1.18	2.0E-12	BE173035.1	EST_HUMAN	MR0-HT0559-200400-015-a08 HT0559 Homo sapiens cDNA
7778	20731		0.57	2.0E-12	AW842798.1	EST_HUMAN	MR2-CN0037-210200-101-b02 CN0037 Homo sapiens cDNA
7822	20865	34253	2.1	2.0E-12	11422228	NT	Homo sapiens Ac-like transposable element (AL-TE), mRNA
9077	22043	35466	0.43	2.0E-12	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYLGLACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYLGLACTOSAMINYLTRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N-ACETYLGLACTOSAMINYLTRANSFERASE) (GALNAc-T1)
9883	22820		1.65	2.0E-12	AF186864.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
10346	23269		14.41	2.0E-12	BE165860.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
10881	23801	37304	0.8	2.0E-12	AC334130.1	EST_HUMAN	qq07802.x1 Soares_NH-MP_U_S1 Homo sapiens cDNA clone IMAGE:1691835 3' similar to TR-Q19538 Q19538 ORF2: FUNCTION UNKNOWN.;
12308	25116		3.11	2.0E-12	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12511	25245		1.69	2.0E-12	11418248	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
123	13231	26159	2.83	1.0E-12	AW627674.1	EST_HUMAN	h190a09.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2970040 3' similar to contains MER18.11 MER18 repetitive element;
2004	15025		1.46	1.0E-12	AI871726.1	EST_HUMAN	wn51f07.x1 NCL_CGAP_U42 Homo sapiens cDNA clone IMAGE:2439493 3' similar to contains L1.b3 L1 repetitive element;
3085	16142	28063	0.78	1.0E-12	AF000991.1	NT	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds
3085	16142	29054	0.78	1.0E-12	AF000991.1	NT	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds
3888	16928	29836	31.6	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
3888	16928	29837	31.6	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
6078	19158		2.05	1.0E-12	U82828.1	NT	Homo sapiens ataxia telangiectasia (ATM) gene, complete cds
6159	19234		1.65	1.0E-12	Q9Y2G7	SWISSPROT	HYPOTHETICAL ZINC FINGER PROTEIN KIAA0961
6277	19349	32582	0.57	1.0E-12	BF642800.1	EST_HUMAN	EST000008 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1847869 5'
6277	19349	32583	0.57	1.0E-12	BF642800.1	EST_HUMAN	EST000008 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1847869 5'
6882	19739	33014	0.78	1.0E-12	AF226943.1	NT	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
7323	20294	33637	1.9	1.0E-12	AF189864.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
7357	20327	33675	11.35	1.0E-12	AI248533.1	EST_HUMAN	qh68a04.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.11 MER10 repetitive element;
7357	20327	33676	11.35	1.0E-12	AI248533.1	EST_HUMAN	qh68a04.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.11 MER10 repetitive element;
8834	21801	35220	0.48	1.0E-12	U66059.1	NT	Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV6S1A1T, TCRBV7S1A1N2T, TCRBV6S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
9063	22019	35444	1.16	1.0E-12	AA762323.1	EST_HUMAN	ac28d05.s1 Stratagene ovary (#837217) Homo sapiens cDNA clone IMAGE:857677 3'
12213	25052	39326	2.92	1.0E-12	AW962164.1	EST_HUMAN	EST974237 MAGE resequences, MAGG Homo sapiens cDNA
12434	25200		2.54	1.0E-12	A1736592.1	EST_HUMAN	w133f08.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2392095 3'
12682	25681		2.51	1.0E-12	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
1054	14100	27050	0.7	9.0E-13	AW082714.1	EST_HUMAN	xb61f07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2580805 3' similar to contains MER28.13 MER28 repetitive element;
3843	16886		1.01	9.0E-13	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3967	17007	29623	0.96	9.0E-13	AB028900.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9860	22887		2.59	9.0E-13	N69853.1	EST_HUMAN	z268b08.s1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:293651 3'
718	13780	26714	6.78	8.0E-13	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
718	13780	26715	6.78	8.0E-13	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
1855	14881	27877	3.1	8.0E-13	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nail) and survival motor neuron protein (smn) genes, complete cds
8449	21418	34831	0.75	8.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U4 Homo sapiens cDNA clone IMAGE:2437601 3'
8449	21418	34832	0.75	8.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U4 Homo sapiens cDNA clone IMAGE:2437601 3'
10505	23427		4	8.0E-13	U78027.1	NT	Homo sapiens Brulon's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like fibronectin protein (L44L) and FIP3 (FIP3) genes, complete cds
8127	21084	34462	0.98	7.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U4 Homo sapiens cDNA clone IMAGE:2437601 3'
8127	21084	34463	0.98	7.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U4 Homo sapiens cDNA clone IMAGE:2437601 3'
8578	21544		0.49	7.0E-13	Q85155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
12682	25350		6.56	7.0E-13	BE778223.1	EST_HUMAN	601463285F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868613 5'
2111	15128	28148	3.56	8.0E-13	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
3333	16384		0.74	5.0E-13	R78338.1	EST_HUMAN	y8204.r1 Soares placenta NB2-IP Homo sapiens cDNA clone IMAGE:145759 5'
3408	16457		1.35	5.0E-13	AA435773.1	EST_HUMAN	z77a12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728350 3' similar to contains Alu repetitive element/contains element MER22 repetitive element;
7060	20082	33390	0.7	5.0E-13	P08983	SWISSPROT	GAP JUNCTION BETA-1 PROTEIN (CONNEXIN 30) (CX30)
11209	24163	37893	2.07	5.0E-13	P07313	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
1883	14908		6.02	4.0E-13	AW378614.1	EST_HUMAN	PM2-HT0224-221099-001-e11 HT0224 Homo sapiens cDNA
2467	15471		2.44	4.0E-13	AF035529.1	NT	Homo sapiens glycocalyx 3 (GPC3) gene, partial cds and flanking repeat regions
4778	17798		0.99	4.0E-13	AA454054.1	EST_HUMAN	zx48007.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:785469 5'
5667	18782	31831	4.36	4.0E-13	BE169131.1	EST_HUMAN	PM9-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
7413	20380	33731	1.05	4.0E-13	AB037750.1	NT	Homo sapiens mRNA for KIAA1529 protein, partial cds
7870	20814	34192	0.98	4.0E-13	AA431529.1	EST_HUMAN	zx78g12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:782182 5' similar to TR:G452763 G452763 COR1 MRNA;
7868	20828		1.47	4.0E-13	AA4291.1	EST_HUMAN	y63305.r1 Soares melanocyte 2N1H1M Homo sapiens cDNA clone IMAGE:2793080 5' similar to PIR:AS2895
9183	22159	35537	1.2	4.0E-13	AL043810.1	EST_HUMAN	A32895 t complex sterility protein - mouse;
6880	22788	36249	0.59	4.0E-13	AA076807.1	EST_HUMAN	DKF7p434A0128 r1 434 (synonym: hies63) Homo sapiens cDNA clone DKF7p434A0128 5'
10380	23303	36779	5.26	4.0E-13	A289831.1	EST_HUMAN	7B04H11 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B04H11
11502	24444	37995	1.9	4.0E-13	AA435819.1	EST_HUMAN	q132405.x1 NCI CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1868945 3' similar to contains Alu repetitive element;
11502	24444	37996	1.9	4.0E-13	AA435819.1	EST_HUMAN	z778g10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
181	13281		5.01	3.0E-13	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
868	13922		3.35	3.0E-13	AA430310.1	EST_HUMAN	z688g08.L1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781408 5'
2378	16386	28410	1.65	3.0E-13	AL271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
2487	16491		2.11	3.0E-13	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2873	16970	28888	2.5	3.0E-13	BF372862.1	EST_HUMAN	CM3-FT0100-140700-242408 F10100 Homo sapiens cDNA
3201	18258		2.19	3.0E-13	AA745944.1	EST_HUMAN	cb18d02.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324036 3'
3514	16560	29484	0.9	3.0E-13	P18816	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT (VERSION 1)
3514	16560	29485	0.9	3.0E-13	P18816	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT (VERSION 1)
5618	18714	31872	0.64	3.0E-13	AA134017.1	EST_HUMAN	z188h10.L1 Stratiene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565315 5' similar to contains THR12 THR repetitive element;
5618	18714	31873	0.64	3.0E-13	AA134017.1	EST_HUMAN	z188h10.L1 Stratiene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565315 5' similar to contains THR12 THR repetitive element;
6106	19185	32404	0.71	3.0E-13	AW005639.1	EST_HUMAN	w288c02.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2565890 3' similar to TR:O75139 O75139 KIAA0644 PROTEIN.;
8215	21184	34584	8.24	3.0E-13	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
8412	21381	34787	0.51	3.0E-13	AA352487.1	EST_HUMAN	EST60487 Activated T-cells XX Homo sapiens cDNA 5' and similar to similar to serine protease P100, Re-reactive factor
8412	21381	34788	0.61	3.0E-13	AA352487.1	EST_HUMAN	EST60487 Activated T-cells XX Homo sapiens cDNA 5' and similar to similar to serine protease P100, Re-reactive factor
10558	23480	36876	0.46	3.0E-13	AW835487.1	EST_HUMAN	RC2-DT0007-110100-014-g10 DT0007 Homo sapiens cDNA
11036	24000		2.68	3.0E-13	AI064768.1	EST_HUMAN	HA0536 Human fetal liver cDNA library Homo sapiens cDNA
11385	24332	37861	3.32	3.0E-13	BE063509.1	EST_HUMAN	CM0-BT0281-031198-087-c03 BT0281 Homo sapiens cDNA
11924	24805	38398	1.54	3.0E-13	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
151	13254	26183	3.93	2.0E-13	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
1275	14310	27271	7.14	2.0E-13	AF239710.1	NT	Homo sapiens DNA polymerase delta small subunit (POLD2) gene, exons 1 through 11 and complete cds
3294	16347	29287	1.08	2.0E-13	BF431890.1	EST_HUMAN	nab76f05.x1 Soares_NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE: 3'
3518	16564	29489	1.25	2.0E-13	AF108907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4135	17167		1.61	2.0E-13	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6245	19318	32548	4.71	2.0E-13	Q06852	SWISSPROT	CELL SURFACE GLYCOPROTEIN 1 PRECURSOR (OUTER LAYER PROTEIN B) (S-LAYER PROTEIN 1)
6987	20210	33538	6.49	2.0E-13	X16912.1	NT	Human PFKL gene for liver-type 6-phosphofructokinase (EC 2.7.1.11) exon 2
7255	19890	33287	0.59	2.0E-13	10835072	NT	Homo sapiens N-myristoyltransferase 1 (NMT1), mRNA
7255	18990	33288	0.59	2.0E-13	10835072	NT	Homo sapiens N-myristoyltransferase 1 (NMT1), mRNA
10824	23745	37246	4.53	2.0E-13	5031898	NT	Homo sapiens mab-21 (C. elegans)-like 1 (MAB21L1) mRNA
12387	25165		5.43	2.0E-13	AW882155.1	EST_HUMAN	CMD-NN0001-100300-274-011 NN0001 Homo sapiens cDNA
291	13385	26312	1.49	1.0E-13	S74129.1	NT	FGF-1=fibroblast growth factor 1 [human, kidney, Genomic, 342 nt, segment 2 of 2]
889	13944	26902	4.95	1.0E-13	AJ007973.1	NT	Homo sapiens LGMD2B gene
1339	14373	27343	1.39	1.0E-13	X87344.1	NT	H. sapiens DNA, DMB, HLA-Z1, JPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
2037	15056	28074	2.43	1.0E-13	AA720574.1	EST_HUMAN	nm21g02.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR13
4623	17844	30532	2.2	1.0E-13	BF340987.1	EST_HUMAN	THR repetitive element;
6588	19846	32915	0.61	1.0E-13	AA080732.1	EST_HUMAN	602338009F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4185908 5'
8242	21211	34816	0.78	1.0E-13	AA577812.1	EST_HUMAN	Y1636.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
8242	21211	34817	0.78	1.0E-13	AA577812.1	EST_HUMAN	nm24d01.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084801 3' similar to contains Alu
10450	23372		0.82	1.0E-13	O15481	SWISSPROT	repetitive element; contains element MER24 repetitive element;
10684	23586	37084	0.49	1.0E-13	AF300701.1	NT	repetitive element; contains element MER24 repetitive element;
11707	24672	38249	10.13	1.0E-13	BF108765.1	EST_HUMAN	repetitive element; contains element MER24 repetitive element;
12206	25048		2.34	1.0E-13	AV715377.1	EST_HUMAN	nm24d01.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084801 3' similar to contains Alu
12844	25454		3.21	1.0E-13	AJ271735.1	NT	repetitive element; contains element MER24 repetitive element;
333	13422	26345	3.14	9.0E-14	AA781159.1	EST_HUMAN	MELANOMA-ASSOCIATED ANTIGEN B4 (MAGE-B4 ANTIGEN)
334	13423	26346	2.37	9.0E-14	AA781159.1	EST_HUMAN	Mus musculus osteoblastic protein tyrosine phosphatase mRNA, complete cds
2508	15511		4.8	9.0E-14	AW881577.1	EST_HUMAN	745e10.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER19.11 MER19
2597	15598	28617	1.03	9.0E-14	AJ133127.1	NT	contains MER28.b2 MER28 repetitive element;
2597	15598	28618	1.03	9.0E-14	AJ133127.1	NT	AV716377 DCB Homo sapiens cDNA clone DCBAIE03 5'
2764	15768	28777	6.94	9.0E-14	AB038162.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
							q24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
							repetitive element;
							q24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
							repetitive element;
							RC4-CT0322-080100-019-d08 CT0322 Homo sapiens cDNA
							Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
							Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
							Homo sapiens TFF gene cluster for trefoil factor, complete cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3128	16185	28094	5.43	9.0E-14	AW513286.1	EST_HUMAN	xc54h05.x1 NCI_CGAP_UK1 Homo sapiens cDNA clone IMAGE:2707833 3'
3252	19422	26345	0.67	9.0E-14	AA781169.1	EST_HUMAN	q24c01.s1 Soares_fasits_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
3811	16851	29759	7.16	9.0E-14	D14547.1	NT	repetitive element:
4789	17807	30699	1.68	9.0E-14	AJ02153.1	NT	Human DNA, SINE repetitive element
3509	16555		1.44	8.0E-14	BE468283.1	EST_HUMAN	Sagittarius oedipus gene for seminal vesicle secreted protein semenogelin I
3978	17018		3.46	8.0E-14	R70289.1	EST_HUMAN	h271c09.x1 NCI_CGAP_L124 Homo sapiens cDNA clone IMAGE:3213424 3'
9803	21126	34530	21.45	8.0E-14	X88211.1	NT	yf2a03.l1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:144798 3'
9818	22739	36182	3.1	8.0E-14	AA216916.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
11782	24690		1.52	8.0E-14	BE082558.1	EST_HUMAN	z17c10.x1 Stragatena fetal retina 937202 Homo sapiens cDNA clone IMAGE:628970 3'
12560	25294	31783	2.99	8.0E-14	AF88118.1	EST_HUMAN	QV2-BT0259-261099-014-a01 BT0258 Homo sapiens cDNA
1633	15873		3.99	7.0E-14	AW151673.1	EST_HUMAN	wc82f08.x1 NCI_CGAP_C83 Homo sapiens cDNA clone IMAGE:2328143 3'
9272	22238		0.51	7.0E-14	AL163285.2	NT	x07c10.x1 NCI_CGAP_Ges4 Homo sapiens cDNA clone IMAGE:2823148 3' similar to contains MER10.12
367	13453	26381	16.94	6.0E-14	AF020503.1	NT	MER10 repetitive element:
10181	23106	36587	2.54	6.0E-14	AF020503.1	NT	Homo sapiens chromosome 21 segment HS21C085
10181	23106	36588	2.54	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
620	13685	26803	5.23	5.0E-14	Q63120	SWISSPROT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
3683	16726		0.95	5.0E-14	AL163247.2	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
5093	18103	30979	1.39	5.0E-14	AW073781.1	EST_HUMAN	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
5611	18707	31864	4.84	5.0E-14	P08547	SWISSPROT	CANALICULAR MULTISPECIFIC ORGANIC ANION TRANSPORTER 1 (MULTIDRUG RESISTANCE-ASSOCIATED PROTEIN 2) (CANALICULAR MULTIDRUG RESISTANCE PROTEIN)
1125	15959		1.95	4.0E-14	P04928	SWISSPROT	Homo sapiens chromosome 21 segment HS21C047
1895	14620	27916	7	4.0E-14	AJ007973.1	NT	repetitive element:
3765	16807		1	4.0E-14	AA046502.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
4320	17349	30233	0.96	4.0E-14	N46328.1	EST_HUMAN	S-ANTIGEN PROTEIN PRECURSOR
8291	21280		0.6	4.0E-14	X87344.1	NT	Homo sapiens LGMD2B gene
							z067a08.l1 Soares_pregnant_uterus_NHIFU Homo sapiens cDNA clone IMAGE:497858 5'
							yf73c12.s1 Soares_multiple_sclerosis_2NblHMSF Homo sapiens cDNA clone IMAGE:279190 3' similar to contains L1.13 L1 repetitive element;
							HL-sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes

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12005	25088		6.38	4.0E-14	AI886224.1	EST_HUMAN	wm08c03.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2435332 3' similar to contains Alu repetitive element
950	14003	28955	4.69	3.0E-14	X95468.1	NT	R.nervigicus mRNA for OPG2 protein
4963	17878	30808	1.16	3.0E-14	7656884	NT	Homo sapiens a disintegrin and metalloproteinase domain 29 (ADAM29), mRNA
6998	19950	33246	0.96	3.0E-14	AI420788.1	EST_HUMAN	ts81c12.x1 NCI_CGAP_Py28 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:O00519 O00519 FATTY ACID AMIDE HYDROLASE. ;
6998	19950	33247	0.96	3.0E-14	AK20788.1	EST_HUMAN	ts81c12.x1 NCI_CGAP_Py28 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:O00519 O00519 FATTY ACID AMIDE HYDROLASE. ;
7021	25875		0.51	3.0E-14	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7229	20251	33595	0.57	3.0E-14	AA398311.1	EST_HUMAN	EST186054 Brain IV Homo sapiens cDNA
9139	22105	35531	0.83	3.0E-14	N42165.1	EST_HUMAN	y07b10.1 Soares melanocyte 2N4IM Homo sapiens cDNA clone IMAGE:270523 5'
11337	24287	37811	2.83	3.0E-14	BE888018.1	EST_HUMAN	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
11568	18347	31293	6.03	3.0E-14	AW285354.1	EST_HUMAN	xp45f12.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element ;
12824	25864		1.88	3.0E-14	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
390	13465	26395	2.76	2.0E-14	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
390	13465	26398	2.76	2.0E-14	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
691	15847	26882	9.98	2.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2397	15404		1.89	2.0E-14	AW372868.1	EST_HUMAN	RC5-BT0377-091289-031-D12 BT0377 Homo sapiens cDNA
2472	15476		1.4	2.0E-14	7657829	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
2531	15534	28554	2.2	2.0E-14	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2547	15548		1.03	2.0E-14	BE222432.1	EST_HUMAN	hw90g10.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3180738 3' similar to contains Alu repetitive element; contains OFR.11 OFR repetitive element ;
2883	15679		1.48	2.0E-14	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5602	18698	31689	0.91	2.0E-14	BF380661.1	EST_HUMAN	IL2-UT0072-240800-142-D07 UT0072 Homo sapiens cDNA
5702	18787	31972	0.81	2.0E-14	AI812351.1	EST_HUMAN	ts78d01.x2 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050225 3' similar to contains L1.13 L1 repetitive element ;
5809	18899	32082	3.18	2.0E-14	U01317.1	NT	Human beta globin region on chromosome 11
7067	20089		0.92	2.0E-14	BE000550.1	EST_HUMAN	RC3-BN0072-240200-011-a08 BN0072 Homo sapiens cDNA
7290	20282	33596	0.57	2.0E-14	4585709	NT	Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11) mRNA
7602	20467	33828	0.87	2.0E-14	P56163	SWISSPROT	ZINC-FINGER PROTEIN NEURO-D4
7751	20704	34072	21.51	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071288-024-D04 HT0397 Homo sapiens cDNA
7751	20704	34073	21.51	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071288-024-D04 HT0397 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10277	23202	36887	0.52	2.0E-14	A1978795.1	EST_HUMAN	wf5g10.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2482034 3' similar to contains Alu repetitive element
10783	23704	37203	0.53	2.0E-14	AV741648.1	EST_HUMAN	AV741648 CB Homo sapiens cDNA clone C8FB8F04 5'
11133	24093	37622	3.94	2.0E-14	AW139800.1	EST_HUMAN	UH-BH1-adv-e-10-0-U1.s1 NCI_CGAP_Sub03 Homo sapiens cDNA clone IMAGE:2718234 3'
12822	25957		1.71	2.0E-14	AF008191.1	NT	Homo sapiens putative G6 protein (GR6) gene, complete cds
1068	14113	27063	2.09	1.0E-14	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1405	14438	27406	8.16	1.0E-14	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
1405	14438	27407	8.16	1.0E-14	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
2017	15038	28049	15.42	1.0E-14	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds's
2195	15210	28228	5.77	1.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2419	15426	28449	6.29	1.0E-14	AF001689.1	NT	Homo sapiens ribosomal protein L23A (RPL23A) gene, complete cds
2855	16013	28940	1.05	1.0E-14	P05227	SWISSPROT	HISTIDINE-RICH PROTEIN PRECURSOR (CLONE PFHRP-II)
3182	16237	29154	6.2	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-019-a08_1 CT0432 Homo sapiens cDNA
3182	16237	29155	6.2	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-019-a09_1 CT0432 Homo sapiens cDNA
3901	16941	29852	1.75	1.0E-14	AA882994.1	EST_HUMAN	aa88c12.s1 Strabagene schizo brain S11 Homo sapiens cDNA clone IMAGE:971350 3'
4500	17625	30410	2.07	1.0E-14	AW275882.1	EST_HUMAN	xq39h10.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2763059 3'
5807	18993	32184	2.1	1.0E-14	AF126145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XI-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
6831	25669	33176	11.02	1.0E-14	11437150	NT	Homo sapiens promitin (mouse)-like 1 (PROML1), mRNA
6831	25669	33177	11.02	1.0E-14	11437150	NT	Homo sapiens promitin (mouse)-like 1 (PROML1), mRNA
1579	14612	27584	1.78	9.0E-15	7427622	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPR7), mRNA
2183	15198		1.37	9.0E-15	AF198779.1	NT	Homo sapiens transcription factor IGH-IM enhancer 3, JIM1 protein, JIM4 protein, JIM5 protein, T64 protein, JIM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synapophysin genes, complete cds; and L-type calcium channel α
7738	20993	34058	4.26	9.0E-15	P21416	SWISSPROT	GAG POLYPROTEIN[CONTAINS: CORE PROTEINS P15, P12, P30, P10]
8350	21319	34733	1.17	9.0E-15	BE903559.1	EST_HUMAN	601677760F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3860153 5'
2822	13653		1.42	8.0E-15	BE261482.1	EST_HUMAN	601149632F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3164023 5'
7387	20356	33708	1.55	7.0E-15	BF035327.1	EST_HUMAN	601459531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
10801	23722		2.45	7.0E-15	AW241958.1	EST_HUMAN	xn77402.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700483 3' similar to contains THR12 THR repetitive element;
996	14047	27001	6.55	6.0E-15	AJ271736.1	NT	Homo sapiens Xq pseudocautosomal region; segment 2/2
6027	19110	32311	1.11	6.0E-15	X73482.1	NT	O.aries mRNA for hair keratin cysteine-rich protein
6027	19110	32312	1.11	6.0E-15	X73462.1	NT	O.aries mRNA for hair keratin cysteine-rich protein

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Single Exon Probes Expressed in Bone Marrow

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410	13483	28418	5.24	5.0E-15	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
2771	15763	28784	2.05	5.0E-15	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (H1A-H) gene, RoRet gene, and sodium phosphate transporter (NPTS) gene, complete cds
3482	16528		1.08	5.0E-15	AW268817.1	EST_HUMAN	UHHBW0-gjb-q-10-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2731219 3'
11035	23988		2.27	5.0E-15	AV730068.1	EST_HUMAN	AV730068 HTF Homo sapiens cDNA clone HTFAVE08 5'
427	13122	26020	3.54	4.0E-15	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
6822	19876	33185	0.98	4.0E-15	AB007970.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0501
11401	21088	34487	1.79	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
11401	21088	34488	1.79	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
4245	17274		6.54	3.0E-15	N889452.1	EST_HUMAN	LY1142F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone LY1142 5' similar to ANFCARDIODILATIN)
5067	18077	30858	0.67	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
5067	18077	30859	0.67	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
6986	20209		1.27	3.0E-15	Q84625	SWISSPROT	GLUTATHIONE PEROXIDASE RY2D1 PRECURSOR (ODORANT-METABOLIZING PROTEIN RY2D1)
7495	20460	33819	3.68	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
7495	20460	33820	3.68	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
10285	23210		2.68	3.0E-15	AA807128.1	EST_HUMAN	oc38s07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351784 3' similar to contains MER19.11
11146	24106	37633	3.42	3.0E-15	AB026898.1	NT	MER19 repetitive element;
260	13347	26273	4.45	2.0E-15	AF223391.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
368	13454	26382	4.01	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
368	13454	26383	4.01	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2381	15388	28413	1.02	2.0E-15	BE350127.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2381	15388	28414	1.02	2.0E-15	BE350127.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
4085	17128	30023	1.21	2.0E-15	AW239499.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4653	17674		2.73	2.0E-15	AI806335.1	EST_HUMAN	wf0706.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2346923 3' similar to TR:Q61043 Q61043 NINEIN ;
6306	19377	32818	1.02	2.0E-15	BE582352.1	EST_HUMAN	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677268 5'
6306	19377	32817	1.02	2.0E-15	BE582352.1	EST_HUMAN	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677268 5'
7321	20282		1.42	2.0E-15	AJ400877.1	NT	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
7486	20451	33810	2.64	2.0E-15	AA704195.1	EST_HUMAN	z77603.s1 Soares_fetal_liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
7625	20585	33948	4.75	2.0E-15	W05084.1	EST_HUMAN	za78410.r1 Soares_fetal_lung_NHL_19W Homo sapiens cDNA clone IMAGE:288875 5' similar to WP:F44F4.8 CE02227 TRANSPOSASE ;
8117	21054	34451	0.67	2.0E-15	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
9257	22223	35653	2.73	2.0E-15	D14547.1	NT	Human DNA, SINE repetitive element
9427	22391	35829	0.74	2.0E-15	AA397758.1	EST_HUMAN	z77908.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
9427	22391	35830	0.74	2.0E-15	AA397758.1	EST_HUMAN	z77908.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
9759	22700	36157	1.19	2.0E-15	AW379465.1	EST_HUMAN	CMO-HT0244-201099-078-rt12 HT0244 Homo sapiens cDNA
9759	22700	36158	1.19	2.0E-15	AW379465.1	EST_HUMAN	CMO-HT0244-201099-078-rt12 HT0244 Homo sapiens cDNA
11187	24143		4.15	2.0E-15	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12834	18339	31288	3.19	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-48, and partial cds, alternatively spliced
12834	18339	31289	3.19	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2785	15777		2.95	1.0E-15	AI889884.1	EST_HUMAN	b25h05.x1 NCI_CGAP_Li24 Homo sapiens cDNA clone IMAGE:2270745 3' similar to TR:Q13539 Q13539 MARINER TRANSPOSASE ;
3025	16082	29005	1.53	1.0E-15	BE043594.1	EST_HUMAN	hk40e02.y1 NCI_CGAP_Ov34 Homo sapiens cDNA clone IMAGE:2899162 5'
3158	16214	29129	1.2	1.0E-15	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5189	18198	31071	1.11	1.0E-15	AI984928.1	EST_HUMAN	wr88e04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494590 3'
6608	18672	32825	1.63	1.0E-15	T95763.1	EST_HUMAN	ye40e10.s1 Soares_fetal_liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:120294 3' similar to contains MER8 repetitive element ;
7205	20229		1.83	1.0E-15	BE074217.1	EST_HUMAN	QV3-BT0569-270100-074-g05 BT0569 Homo sapiens cDNA
7239	19974	33272	0.76	1.0E-15	P39057	SWISSPROT	DYNEIN BETA CHAIN, CILIARY
8574	21542	34862	1.04	1.0E-15	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
8763	21730	35152	4.51	1.0E-15	AI200976.1	EST_HUMAN	qf88h06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
8763	21730	35153	4.51	1.0E-15	AI200976.1	EST_HUMAN	qf88h06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
8994	22359	35789	0.49	1.0E-15	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
8997	22362	35793	1.5	1.0E-15	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9802	22808	36055	0.79	1.0E-15	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
9890	22917	36383	0.95	1.0E-15	AA894653.1	EST_HUMAN	ch37c03.s1 NCI_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1459872 3' similar to contains L1.13 L1.
11169	24127	37657	4.18	1.0E-15	AF044083.1	NT	repetitive element;
13008	25720	31612	9.25	1.0E-15	AJ783944.1	EST_HUMAN	Homo sapiens major histocompatibility locus class III region
4532	17555	30443	1.15	9.0E-16	4503168	NT	tr31c05.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2218912 3' similar to contains Alu repetitive element;
11338	24288	37812	1.94	9.0E-16	F08888.1	EST_HUMAN	Homo sapiens cut (Drosophila)-like 1 (CCAAT displacement protein) (CUTL1) mRNA
5788	18878	32060	0.79	7.0E-16	4885120	NT	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
7584	20527	33885	1.46	7.0E-16	O88807	SWISSPROT	Homo sapiens chemokine (C-C motif) receptor 8 (CCR8) mRNA
7564	20527	33886	1.45	7.0E-16	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
12957	25809		1.88	7.0E-16	T84149.1	EST_HUMAN	(PEPTIDYLARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
2151	15167		7.77	6.0E-16	AW972811.1	EST_HUMAN	(PEPTIDYLARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
1489	14522	27495	1.28	5.0E-16	AJ251154.1	NT	ye28c12.f1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:118062 5'
2689	15885	28702	2.52	5.0E-16	AA892176.1	EST_HUMAN	EST384702 IMAGE resequences, MAGL Homo sapiens cDNA
10414	23336	36821	0.48	5.0E-16	AL103246.2	NT	Mus musculus olfactory receptor cluster, OR37A, OR37B, OR37C, OR37E genes and OR37D pseudogene
11849	24732	38319	2.54	5.0E-16	BF217388.1	EST_HUMAN	cd80c04.s1 Scores total_fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1623078 3' similar to contains element L1 repetitive element;
13044	25585		10.88	5.0E-16	11418127	NT	Homo sapiens chromosome 21 segment HS21C046
2249	15283		1.94	4.0E-16	AB001523.1	NT	601885734F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4104128 5'
2388	15396	28421	2.21	4.0E-16	AW797168.1	EST_HUMAN	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
2388	15396	28422	2.21	4.0E-16	AW797168.1	EST_HUMAN	Homo sapiens gene for TMEH1 and PWP2, complete and partial cds
3471	16517	29438	3.94	4.0E-16	Q16853	SWISSPROT	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
4168	17197	30083	4.74	4.0E-16	BE083876.1	EST_HUMAN	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
4168	17197	30084	4.74	4.0E-16	BE083876.1	EST_HUMAN	MYELIN-OLIGODENDROCYTE GLYCOPROTEIN PRECURSOR
7980	20919	34310	37.37	4.0E-16	AL163284.2	NT	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
9650	22594	36042	0.97	4.0E-16	11423191	NT	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
12280	25106		2.41	4.0E-16	P08548	SWISSPROT	Homo sapiens chromosome 21 segment HS21C084
12392	25169	31816	2.11	4.0E-16	6912459	NT	Homo sapiens hypothetical protein FLJ10024 (FLJ10024), mRNA
12658	25336		1.36	4.0E-16	R18591.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
133	13238	26168	1.24	3.0E-16	AW022862.1	EST_HUMAN	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
							yf6b11.1 Scores infant brain 1NIB Homo sapiens cDNA clone IMAGE:30489 5'
							df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
133	13238	26170	1.24	3.0E-16	AW022862.1	EST_HUMAN	d145c01.y1 Merton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486378 5'
468	13539		1.91	3.0E-16	AL048445.1	EST_HUMAN	DKFZp494P037.1 434 (synonym: h1853) Homo sapiens cDNA clone DKFZp494P037 5'
476	13548		3.08	3.0E-16	AF135446.1	NT	Homo sapiens TSX (TSX) pseudogene, exon 5
1448	14479	27455	1.53	3.0E-16	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2888	16046	28968	3.94	3.0E-16	P03200	SWISSPROT	ENVELOPE GLYCOPROTEIN GP240 (MEMBRANE ANTIGEN) (MA) [CONTAINS: GLYCOPROTEIN GP220]
3953	16983	28909	0.96	3.0E-16	T08169.1	EST_HUMAN	EST08060 Infant Brain, Bonto Soares Homo sapiens cDNA clone HIBBA13 5' end
3980	17020		0.77	3.0E-16	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphatase hydrolase (FHT) gene, exon 5
3981	17021		1.06	3.0E-16	U09887.1	NT	Human BXP20 gene
5350	18455		1.11	3.0E-16	AA077225.1	EST_HUMAN	7B10F02 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B10F02
5698	18793	31866	1.2	3.0E-16	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
9005	21971	35392	4.92	3.0E-16	A1002836.1	EST_HUMAN	am98h05.a1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1694185 3' similar to contains
10250	23175		0.9	3.0E-16	BF690617.1	EST_HUMAN	THR.b2 TH-R repetitive element ;
10478	23400	36897	5.77	3.0E-16	L79810.1	NT	602246538F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332032 5'
13078	25981	31317	1.4	3.0E-16	AL043268.2	EST_HUMAN	Homo sapiens ADPIA/TP carrier protein (ANT-2) gene, complete cds
973	14025		1.04	2.0E-16	AL163279.2	NT	DKFZp494L1623.1 434 (synonym: h1853) Homo sapiens cDNA clone DKFZp494L1623 5'
2395	15402		1.32	2.0E-16	AA621761.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C079
2689	15695		1.25	2.0E-16	J03061.1	NT	af06404.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1030855 3'
4207	17236	30123	1.14	2.0E-16	X88211.1	NT	Human SSAV-related endogenous retroviral L-TR-like element
6905	18957	33254	0.83	2.0E-16	Q31125	SWISSPROT	H.sapiens DNA for endogenous retroviral like element
7984	20923	34316	1.4	2.0E-16	A1470723.1	EST_HUMAN	HISTIDINE-RICH PROTEIN KE4
							ff16e11.x1 NCL_CGAP_Ges4 Homo sapiens cDNA clone IMAGE:2141708 3' similar to contains element
							MER33 repetitive element ;
8300	21269	34881	1.86	2.0E-16	A1732837.1	EST_HUMAN	nz47906.x5 NCL_CGAP_P12 Homo sapiens cDNA clone IMAGE:1280947 similar to TR-O54849 O54849
8498	21466	34882	0.73	2.0E-16	BE958026.1	EST_HUMAN	HYPOTHETICAL 42.9 KD PROTEIN. [2] TR-O08905 contains MER7.11 MER7 repetitive element ;
8498	21466	34883	0.73	2.0E-16	BE958026.1	EST_HUMAN	782f09.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303521 3'
8872	21839	35261	0.75	2.0E-16	AW877214.1	EST_HUMAN	782f09.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303521 3'
8872	21839	35262	0.75	2.0E-16	AW877214.1	EST_HUMAN	GM4-PT0034-180200-506-a01 PT0034 Homo sapiens cDNA
11274	24226	37752	1.68	2.0E-16	6902146	NT	GM4-PT0034-180200-606-a01 PT0034 Homo sapiens cDNA
186	13286	26210	2.57	1.0E-16	AF200719.1	NT	Homo sapiens ubiquitin carrier protein E2-C (UBCH10), mRNA
							Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
382	13495		37.98	1.0E-16	AA628592.1	EST_HUMAN	af39g11.s1 Soares_tad_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1034084 3' similar to contains OFR.12 OFR repetitive element;
1888	15009	28014	2.22	1.0E-16	BF327942.1	EST_HUMAN	QV0-BN0148-070700-283-at10 BN0148 Homo sapiens cDNA
5810	18900	32083	0.68	1.0E-16	AF163884.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
6574	19634		25.8	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
6726	19782	33061	3.06	1.0E-16	Q02779	SWISSPROT	MITOGEN-ACTIVATED PROTEIN KINASE KINASE 10 (MIXED LINEAGE KINASE 2) (PROTEIN KINASE MST)
7802	19634		6.75	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
9638	22582	36031	1.06	1.0E-16	AW876661.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
3751	16793	29704	2.77	9.0E-17	AW900048.1	EST_HUMAN	CM1-NN1003-200300-163-e01 NN1003 Homo sapiens cDNA
6898	19838		2.36	9.0E-17	AI382984.1	EST_HUMAN	lg22c11.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2106524 3' similar to contains MER28.12
8445	21414		5.47	9.0E-17	AW150257.1	EST_HUMAN	MER28 repetitive element;
10584	23508		2.3	9.0E-17	AF200719.1	NT	hg49g12.x1 NCI CGAP_UH Homo sapiens cDNA clone IMAGE:2630850 3' similar to contains OFR.12 OFR repetitive element;
1020	14086		2.01	8.0E-17	AW880701.1	EST_HUMAN	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
3907	18947		0.88	8.0E-17	AL163280.2	NT	QV0-OT0032-080300-165-e01 OT0032 Homo sapiens cDNA
6663	25842	31927	3.24	8.0E-17	BE172081.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
7490	20455		1.82	8.0E-17	AV730759.1	EST_HUMAN	MRO-HT0559-060300-003-e04 HT0559 Homo sapiens cDNA
8019	20956	34349	0.94	8.0E-17	6753651	NT	AV730759 HTF Homo sapiens cDNA clone HTFAQB07 5'
1452	14485		2.63	7.0E-17	6753097	NT	Mus musculus dyx11n, exon, heavy chain 11 (Dnahr11), mRNA
5396	18489		3.14	7.0E-17	AF216650.1	NT	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA
							Homo sapiens putative MTAP (MTAP) mRNA, partial cds, alternatively spliced
6845	19898	33193	7.34	7.0E-17	AF228843.1	NT	Mus musculus WNT-2 gene, partial cds; putative erythrin-related protein and cyclic fibroblast transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
204	13305	28234	6.82	6.0E-17	AW983980.1	EST_HUMAN	RC1-HN0003-220300-021-e04 HN0003 Homo sapiens cDNA
6446	19511	32761	1.8	6.0E-17	AW602772.1	EST_HUMAN	h81d04.x1 Soares_NFL_T_GBC_31 Homo sapiens cDNA clone IMAGE:2878685 3' similar to contains L1.12 L1 repetitive element;
10555	23577	37074	0.54	6.0E-17	P20138	SWISSPROT	MYELOID CELL SURFACE ANTIGEN CD33 PRECURSOR (GP67)
10928	23848		0.46	6.0E-17	W92331.1	EST_HUMAN	z015f03.s1 Soares_fetal_heart_NB-H19W Homo sapiens cDNA clone IMAGE:356063 3'
421	13116	28014	3.22	5.0E-17	T64110.1	EST_HUMAN	yc015f08.r1 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:78689 5'
7940	20787	34162	1.76	5.0E-17	T81043.1	EST_HUMAN	yc26b04.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:109327 5'
9717	22745	36186	1.24	4.0E-17	AW129165.1	EST_HUMAN	xf20e04.x1 NCI CGAP_Ku8 Homo sapiens cDNA clone IMAGE:2818622 3' similar to contains Alu repetitive element; contains MER19.b1 MER19 repetitive element;

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11821	24704	38286	1.98	4.0E-17	AL163247.2	NT	Human sapiens chromosome 21 segment HS21C047
12303	25114		2.02	4.0E-17	AI073546.1	EST_HUMAN	ov45e04.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1640286 3' similar to TR-Q16530
1490	14623		1.72	3.0E-17	D14547.1	NT	Q16530 PMS3 mRNA ;contains MER10.12 MER10 repetitive element ;
2108	15125	28144	1.22	3.0E-17	AW119123.1	EST_HUMAN	Human DNA, SINE repetitive element
3208	16263		1.68	3.0E-17	P35410	SWISSPROT	xs88c09.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2804784 3'
3658	16889	28614	1.33	3.0E-17	BE326622.1	EST_HUMAN	MAS-RELATED G-PROTEIN-COUPLED RECEPTOR MRG
3656	16889	28615	1.33	3.0E-17	BE326622.1	EST_HUMAN	hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181899 3'
5089	18078		1.17	3.0E-17	BF511286.1	EST_HUMAN	hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181899 3'
							UHH-B14-adj-c-08-0-UJ.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085043 3'
							zs14202.s1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:282491 3' similar to contains
							PTR5.t3 PTR5 repetitive element ;
8611	21579	34995	1.16	3.0E-17	N68461.1	EST_HUMAN	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10080	22887	38455	4.94	3.0E-17	AB026898.1	NT	QV3-BN0047-270700-283-nt12 BN0047 Homo sapiens cDNA
10746	23688	37164	0.73	3.0E-17	BF327012.1	EST_HUMAN	QV3-BN0047-270700-283-nt12 BN0047 Homo sapiens cDNA
10746	23688	37165	0.73	3.0E-17	BF327012.1	EST_HUMAN	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
12268	25089		3.31	3.0E-17	11417988	NT	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1855822 3' similar to contains Alu repetitive element
353	13442	26367	3.4	2.0E-17	AI270080.1	EST_HUMAN	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1855822 3' similar to contains Alu repetitive element
354	13442	26367	3.97	2.0E-17	AI270080.1	EST_HUMAN	zq81d04.s1 Soares fetal heart_NH19W Homo sapiens cDNA clone IMAGE:389761 3'
890	14042		2.04	2.0E-17	AA722832.1	EST_HUMAN	ZONADHESIN PRECURSOR
2453	15458	28478	2.3	2.0E-17	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2453	15458	28480	2.3	2.0E-17	Q28983	SWISSPROT	NEUROFILAMENT TRIPLET H PROTEIN (200 KDA NEUROFILAMENT PROTEIN) (NEUROFILAMENT HEAVY POLYPEPTIDE) (NF-H)
2841	15989	28922	6.23	2.0E-17	P12038	SWISSPROT	Mus musculus ultra high sulfur keratin gene, complete cds
5440	18542	31452	1.8	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
5440	18542	31453	1.8	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
6395	19483		1.89	2.0E-17	AF055098.1	NT	Homo sapiens MHC class 1 region
6638	19696		1.68	2.0E-17	AL134881.1	EST_HUMAN	DKFZp782J0610_r1 782 (synonym: hme2) Homo sapiens cDNA clone DKFZp782J0610 5'
8133	21070	34469	0.85	2.0E-17	AB037838.1	NT	Homo sapiens mRNA for KIAA1418 protein, partial cds
8420	21389	34789	1.47	2.0E-17	Q86166	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF3
8800	21767	35191	1.28	2.0E-17	AA300840.1	EST_HUMAN	EST13504 Testis tumor Homo sapiens cDNA 5' end similar to similar to glycogenin
10228	23163	36943	2.35	2.0E-17	BE288888.1	EST_HUMAN	800944690F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860615 5'
10264	23189	36973	2.83	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10284	23189	36874	2.83	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
10622	23544	37044	5.23	2.0E-17	D13381.1	NT	Human CYP19 gene for aromatase cytochrome P-450, promoter region (containing two cis-acting transcriptional regulatory elements)
10746	23687	37162	0.86	2.0E-17	P98063	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10745	23687	37163	0.88	2.0E-17	P98063	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10772	23683	37190	0.57	2.0E-17	A1788902.1	EST_HUMAN	we94b04.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2348719 3'
10772	23683	37191	0.57	2.0E-17	A1788902.1	EST_HUMAN	we94b04.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2348719 3'
12368	26153		1.31	2.0E-17	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
761	13812	28755	3.24	1.0E-17	P08183	SWISSPROT	MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1)
1721	14751		1.35	1.0E-17	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
1782	14811	27797	4.54	1.0E-17	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2124	15141	28158	1.95	1.0E-17	P02461	SWISSPROT	COLLAGEN ALPHA 1(III) CHAIN PRECURSOR
2343	15353	28374	2.43	1.0E-17	U79410.1	NT	Homo sapiens thrombospondin 2 (THBS2) gene, promoter region and exons 1A and 1B
3581	16826		1.05	1.0E-17	AF224693.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
4162	17193		8.5	1.0E-17	R09942.1	EST_HUMAN	y630e07.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128388 5'
6800	18680		0.88	1.0E-17	AW468468.1	EST_HUMAN	he38e05.x1 NCJ_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2821312 3' similar to contains Alu repetitive element; contains LTR8.t1 LTR8 repetitive element;
6809	18683	33151	1.73	1.0E-17	AH185842.1	EST_HUMAN	q65b05.x1 Soares fetal_jung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
6809	18683	33152	1.73	1.0E-17	AH185842.1	EST_HUMAN	q65b05.x1 Soares fetal_jung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
7288	20288	33603	0.86	1.0E-17	Q16831	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
8939	21905	35329	1.7	1.0E-17	BE062744.1	EST_HUMAN	QV0-BT0263-101289-072-d07 BT0263 Homo sapiens cDNA
10368	23289	36766	0.87	1.0E-17	AW996538.1	EST_HUMAN	QV3-BN0046-220300-129-c10 BN0046 Homo sapiens cDNA
11747	24632	38212	1.84	1.0E-17	Q28824	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SMOOTH MUSCLE (MLCK) [CONTAINS: TELOKIN]
13104	25825		1.83	1.0E-17	BE221470.1	EST_HUMAN	h425e05.x1 NCJ_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171104 3' similar to contains MIER13.b1
9856	22792		2.96	9.0E-18	AI472167.1	EST_HUMAN	MER13 repetitive element;
3800	16840	28747	1.87	8.0E-18	4768977	NT	IMAGE:2148388 3'
							Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNST) mRNA
							POLYPEPTIDE N-ACETYLGLYCOALACTOSAMINYLTRANSFERASE (PROTEIN-UDP
							ACETYLGLYCOALACTOSAMINYLTRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N-
3899	16839	28850	3.75	8.0E-18	Q07537	SWISSPROT	ACETYLGLYCOALACTOSAMINYLTRANSFERASE) (GALNAc-T1)
							xx10b04.x1 NCJ_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20898 60S
349	19438	26361	23.15	7.0E-18	AW316978.1	EST_HUMAN	RIBOSOMAL PROTEIN L4 (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
349	13438	26362	23.15	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NC1_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:120868 60S RIBOSOMAL PROTEIN L4 (HUMAN);
7677	20635	33997	0.85	7.0E-18	AW887642.1	EST_HUMAN	RG3-OT0091-170300-011-d03 OT0091 Homo sapiens cDNA
12769	13438	26361	2.67	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NC1_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:120868 60S RIBOSOMAL PROTEIN L4 (HUMAN);
12769	13438	26362	2.67	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NC1_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:120868 60S RIBOSOMAL PROTEIN L4 (HUMAN);
3306	16359	29278	1.29	6.0E-18	X71791.2	NT	Rattus norvegicus partial Gdnfr-1 gene for glia-derived nadin/protease nexin I, enhancer region
4777	17797		4.3	6.0E-18	P52181	SWISSPROT	PROTEIN-GLUTAMINE GAMMA-GLUTAMYLTRANSFERASE (TISSUE TRANSGLUTAMINASE) (TGASE C) (TGC)
8593	21561		2.84	6.0E-18	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC63446), mRNA
8691	21659	35082	0.57	6.0E-18	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11469	24412	37661	1.54	6.0E-18	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11657	24593	38166	2.06	6.0E-18	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, PIP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
12527	25256	31805	2.95	6.0E-18	U87626.1	NT	Human aconitase hydratase (ACO2) gene, exon 4
1150	14182	27144	17.8	5.0E-18	AI280214.1	EST_HUMAN	qim85g11.x1 Scarsia, placenta, 8to9weeks, 2NbtHP8to9W Homo sapiens cDNA clone IMAGE:1893688 3' similar to contains Alu repetitive element;
5345	18450	31321	0.99	5.0E-18	AF087913.1	NT	Human endogenous retrovirus HERV-P-747D
8070	22036	35459	5.63	5.0E-18	BE143312.1	EST_HUMAN	MRO-HT0161-221099-002-c06 HT0161 Homo sapiens cDNA
11323	24273	37800	3.26	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
11323	24273	37801	3.26	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
12846	25332		6.29	5.0E-18	AW887182.1	EST_HUMAN	MR1-SN0035-060400-001-g11 SN0035 Homo sapiens cDNA
12880	25344		3.2	5.0E-18	AV650547.1	EST_HUMAN	AV650547 GLC Homo sapiens cDNA clone GLCGA02 3'
125	13232	26160	1.04	4.0E-18	BE044076.1	EST_HUMAN	hc36h04.x1 NC1_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3 MER29 repetitive element;
125	13232	26161	1.04	4.0E-18	BE044076.1	EST_HUMAN	hc36h04.x1 NC1_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3 MER29 repetitive element;
1729	14759	27744	1.61	4.0E-18	AA621814.1	EST_HUMAN	mq24f11.at NC1_CGAP_Co10 Homo sapiens cDNA clone IMAGE:1144845 3' similar to gb:M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1806	14930		0.95	4.0E-18	A173592.1	EST_HUMAN	wk33h08.x1 NC1_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2392095 3'
2211	15226	28247	1.1	4.0E-18	Q08430	SWISSPROT	N-ACETYL LACTOSAMINIDE BETA-1,8-N-ACETYL GLUCOSAMINYLTRANSFERASE (N-ACETYL GLUCOSAMINYLTRANSFERASE) (L-BRANCHING ENZYME) (IGNT)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2211	15228	28248	1.1	4.0E-18	Q08430	SWISSPROT	N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (HBRANCHING ENZYME) (IGNT)
3808	18846	29753	0.76	4.0E-18	A1581588.1	EST_HUMAN	ar63b08.x1 Barehead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2173139 3' similar to contains Alu repetitive element
5437	18539	31447	2.29	4.0E-18	A1017565.1	EST_HUMAN	cu23e08.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'
5437	18539	31448	2.28	4.0E-18	A1017565.1	EST_HUMAN	cu23e08.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'
8178	21148		0.67	4.0E-18	AA746811.1	EST_HUMAN	mt64e08.s1 NCL_CGAP_AM1 Homo sapiens cDNA clone IMAGE:1266888 similar to contains L1.12 L1 repetitive element
11348	24288	37826	4.22	4.0E-18	AA371807.1	EST_HUMAN	EST189633 Pituitary gland, subtracted (prolactin/growth hormone) II Homo sapiens cDNA 5' and similar to EST containing O family repeat
850	13906	26885	24.98	3.0E-18	AA814106.1	EST_HUMAN	cb23h11.s1 NCL_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1324581 3' similar to SW_RS6_HUMAN
930	13983	26836	3.54	3.0E-18	BE088634.1	EST_HUMAN	P46782 40S RIBOSOMAL PROTEIN S5.
3972	17012	26826	1.31	3.0E-18	AL103247.2	NT	CM9-BT0690-210300-288-g07 BT0690 Homo sapiens cDNA
7003	20128	33444	6.43	3.0E-18	BE001671.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
11271	24223	37748	1.76	3.0E-18	BF218650.1	EST_HUMAN	PMD-BND081-100300-001-008 BN0081 Homo sapiens cDNA
12774	25412		5.15	3.0E-18	AW022015.1	EST_HUMAN	601884856F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103652 5'
261	13348	26274	5.97	2.0E-18	AW838820.1	EST_HUMAN	df31h12.y1 Morlan Fetal Cochlea Homo sapiens cDNA clone IMAGE:2485128 5'
1155	14197		67.85	2.0E-18	BE266097.1	EST_HUMAN	QV1-LT0038-160200-070-e07 LT0038 Homo sapiens cDNA
3140	16197	29107	1.27	2.0E-18	Q39575	SWISSPROT	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5'
5485	18585		3.85	2.0E-18	AA888810.1	EST_HUMAN	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
5584	18880	31844	3.38	2.0E-18	D14547.1	NT	ak53e07.s1 Scores_basfis_NHT Homo sapiens cDNA clone IMAGE:1409652 3' similar to TR:O14577
5584	18880	31845	3.38	2.0E-18	D14547.1	NT	O14577 BAC CLONE RG114A08 FROM 7Q31, COMPLETE SEQUENCE. ;
5978	19063		1.67	2.0E-18	BF347229.1	EST_HUMAN	Human DNA, SINE repetitive element
6289	19361	32568	1	2.0E-18	X60459.1	NT	Human DNA, SINE repetitive element
6289	19361	32569	1	2.0E-18	X60459.1	NT	Human DNA, SINE repetitive element
6408	19477	32724	0.76	2.0E-18	BF352840.1	EST_HUMAN	602021164F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
6451	19516	32767	4.42	2.0E-18	AW665953.1	EST_HUMAN	Human IFNAR gene for interferon alpha/beta receptor
7670	20629	33983	0.72	2.0E-18	AA457619.1	EST_HUMAN	Human IFNAR gene for interferon alpha/beta receptor
8487	21455	34872	0.52	2.0E-18	BE439524.1	EST_HUMAN	IL3-HT0619-220700-222-C12 HT0619 Homo sapiens cDNA
							hnb4g01.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA
							MER19.12 MER19 repetitive element ;
							aa69c111.r1 Stragere fetal retina 937202 Homo sapiens cDNA clone IMAGE:838485 5' similar to
							TR:G61634 G61634 POLYPEPTIDE PR77 ;
							HTM1-160F1 HTM1 Homo sapiens cDNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10407	23329	36813	1.31	2.0E-18	AW151673.1	EST_HUMAN	x167e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12 MER10 repetitive element;
10407	23329	36814	1.31	2.0E-18	AW151673.1	EST_HUMAN	x167e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12 MER10 repetitive element;
11319	24269	37797	3.07	2.0E-18	AW470791.1	EST_HUMAN	ha33d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2876469 3' similar to contains THR.L53 THR repetitive element;
12039	24914	38508	2.88	2.0E-18	AW151299.1	EST_HUMAN	xg47e09.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2630728 3' similar to contains MER8.D2 MER8 repetitive element;
12461	14107		3.97	2.0E-18	BE256097.1	EST_HUMAN	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5' ye43g05.r1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:120536 5' similar to contains L1 repetitive element;
4445	17471		0.93	1.0E-18	T85406.1	EST_HUMAN	AV653405 GLC Homo sapiens cDNA clone GLCDKE11 3' Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
5429	18532	31412	2.71	1.0E-18	AV653405.1	EST_HUMAN	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
5650	18748	31914	1.87	1.0E-18	D00099.1	NT	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
5650	18746	31915	1.87	1.0E-18	D00099.1	NT	Homo sapiens chromosome 21 segment HS21C080 contains L1.t1 L1 repetitive element;
6597	19657	32929	1.33	1.0E-18	AL163280.2	NT	alpha60d09.x1 Soares sarcomatous fibroblasts_NHHSF Homo sapiens cDNA clone IMAGE:1680593 3' similar to contains L1.t1 L1 repetitive element;
8765	21752	35174	1.13	1.0E-18	AI148288.1	EST_HUMAN	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
10259	23184	36869	4.28	1.0E-18	U91928.1	NT	Homo sapiens glycican 3 (GPC3) gene, partial cds and flanking repeat regions
12412	25184	31821	6.49	1.0E-18	AF003529.1	NT	x11d06.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
547	13918	26540	5.55	9.0E-19	AA281961.1	EST_HUMAN	x11d06.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
548	13918	26540	4.1	9.0E-19	AA281961.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
8181	21151		5.71	9.0E-19	F08698.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
9036	22002	35423	2.64	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
9036	22002	35424	2.64	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
11482	24405	37953	3.37	9.0E-19	AB032669.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
12172	13918	26540	1.94	9.0E-19	AA281961.1	EST_HUMAN	x11d06.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
1050	14098		1.31	8.0E-19	AW974002.1	EST_HUMAN	EST1397007 MAGE rescues, MAGN Homo sapiens cDNA
4433	17490		0.98	8.0E-19	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8498	21456	34873	1.04	8.0E-19	BE159636.1	EST_HUMAN	MRO-HT0404-210200-001-g06 HT0404 Homo sapiens cDNA

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2257	15271	28286	1.43	7.0E-19	4758139	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp) box polypeptide 6 (RNA helicase, 54kD) (DDX6) mRNA
6598	19658	32030	1.95	7.0E-19	AF082080.1	NT	Rattus norvegicus cp151 mRNA, partial cds
7519	20484	33845	1.02	7.0E-19	P28444	SWISSPROT	BETA CRYSTALLIN A2
10372	23285	36771	0.43	7.0E-19	A344951.1	EST_HUMAN	hs01c08.x1 NC1_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2052302 3'
12313	25688		3.28	7.0E-19	AA705894.1	EST_HUMAN	zf08b01.a1 Soares fetal_liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:435145 3'
3782	16833		1.6	6.0E-19	AW852930.1	EST_HUMAN	PM0-CT0248-131089-001-g01 CT0248 Homo sapiens cDNA
4490	17516	30403	1.44	6.0E-19	P34988	SWISSPROT	OLFACTORY RECEPTOR 8 (M50)
4490	17516	30404	1.44	6.0E-19	P34988	SWISSPROT	OLFACTORY RECEPTOR 8 (M50)
4837	17854		1.47	6.0E-19	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
5064	18074	30954	1.28	6.0E-19	AL120817.1	EST_HUMAN	DKFZp782F192.1 762 (synonym: hme2) Homo sapiens cDNA clone DKFZp782F192.5'
5858	19043	32242	4.88	5.0E-19	Q00193	SWISSPROT	ZONA PELLUCIDA SPERM-BINDING PROTEIN B PRECURSOR (ZONA PELLUCIDA GLYCOPROTEIN ZP-X) (RC55)
6342	19411	32852	0.69	5.0E-19	AW683302.1	EST_HUMAN	hth77608.y1 NC1_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2668787 5'
10790	23711	37213	0.78	5.0E-19	AJ287686.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exon 14
11865	24747	38329	4.78	5.0E-19	AW183726.1	EST_HUMAN	x87b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2684171 3' similar to contains element MSR1 repetitive element :
556	13828	26544	0.89	4.0E-19	AB007870.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIA0501
2891	15687	28704	1.69	4.0E-19	BF687362.1	EST_HUMAN	602130910F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4287874 5'
5470	18571	31491	1.05	4.0E-19	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
3668	16905	29812	1.4	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
3668	16905	29813	1.4	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
4315	17344	30227	0.89	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4315	17344	30228	0.89	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4475	17501	30385	1.79	3.0E-19	AV708138.1	EST_HUMAN	AV708136 ADG Homo sapiens cDNA clone ADCAMA11 5'
5552	18457		0.63	3.0E-19	AF223487.1	NT	Homo sapiens NPD008 protein (NPD008) mRNA, complete cds
7612	20572		1.81	3.0E-19	11432214	NT	Homo sapiens similar to aldo-keto reductase family 1, member B11 (aldo reductase-like) (H. sapiens) (LOC83222), mRNA
8814	21137	34539	1.11	3.0E-19	X89886.1	NT	M.musculus mRNA for TPCR33 protein
12552	25275		16.28	3.0E-19	AF165520.1	NT	Homo sapiens phorbol 1 protein (PBI) mRNA, complete cds
2567	15588	28588	27.04	2.0E-19	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4474	17500		1.23	2.0E-19	AK111793.1	EST_HUMAN	qs01e02.x1 NC1_CGAP_Ku55 Homo sapiens cDNA clone IMAGE:1915898 3' similar to TRC-Q69398 Q69398 POL/ENV GENE ;

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6172	19247	32480	0.61	2.0E-19	AV731382.1	EST_HUMAN	AV731382 HTF Homo sapiens cDNA clone HTFAZC06 5'
7561	20524	33882	0.72	2.0E-19	7657286	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
8673	21641	35068	0.35	2.0E-19	AA012854.1	EST_HUMAN	2634c09.t1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360880 5'
10269	23194	36882	0.68	2.0E-19	Q95155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
482	13555		2.11	1.0E-19	BE408811.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
							yc70g07.t1 Soares adult brain N2b4HB65Y Homo sapiens cDNA clone IMAGE:184188 5' similar to contains MER10 repetitive element;
2174	15180	28211	1.68	1.0E-19	H30705.1	EST_HUMAN	Human gene for Ah-receptor, exon 7-9
2729	16723		2.48	1.0E-19	D39044.1	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
2890	15920		4.28	1.0E-19	4758977	NT	q49b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1303831 3' similar to contains MER37.12
3412	18460	28381	1.18	1.0E-19	AA834867.1	EST_HUMAN	MER37 repetitive element;
5188	18195		0.9	1.0E-19	AW117377.1	EST_HUMAN	xd88n10.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2604739 3' similar to contains L1.12 L1 L1 repetitive element;
6183	19287	32502	2.73	1.0E-19	U12188.1	NT	Oryctolagus cuniculus sodium/dicarboxylate cotransporter mRNA, partial cds
6333	25095		0.63	1.0E-19	AA595527.1	EST_HUMAN	nh22ad03.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:953083 similar to contains L1.11 L1 repetitive element;
7890	20834	34213	0.99	1.0E-19	U08813.1	NT	Oryctolagus cuniculus Na+/glucose cotransporter-related protein mRNA, complete cds
7890	20834	34214	0.99	1.0E-19	U08813.1	NT	Oryctolagus cuniculus Na+/glucose cotransporter-related protein mRNA, complete cds
8085	25804		0.71	1.0E-19	AF200718.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
8763	21760	35182	1.72	1.0E-19	M84857.1	NT	Rabbit phosphotyrase kinase beta subunit mRNA, complete cds
							ye72b02.t1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:123243 5' similar to contains OFR repetitive element;
9083	22059		2.74	1.0E-19	T89820.1	EST_HUMAN	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
10106	23032		0.97	1.0E-19	U60822.1	NT	ROO-ST0174-191098-031-b05 ST0174 Homo sapiens cDNA
10547	23469	36964	27.33	1.0E-19	AW1812259.1	EST_HUMAN	W91e09.t1 Soares melanocyte 2NbhHM Homo sapiens cDNA clone IMAGE:272872 5'
10557	23479	36974	2.1	1.0E-19	N44693.1	EST_HUMAN	df49n01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2487000 5'
11809	24694		3.69	1.0E-19	AW023137.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6803	19857	33143	2.45	8.0E-20	7657286	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6803	19857	33144	2.45	8.0E-20	7657286	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
7761	20714	34084	1.31	8.0E-20	A121371.1	EST_HUMAN	qg86f09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
7761	20714	34085	1.31	8.0E-20	A121371.1	EST_HUMAN	qg86f09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
3289	16342	28263	0.72	7.0E-20	BF328455.1	EST_HUMAN	PM4-AN0088-050900-003-a04 AN0088 Homo sapiens cDNA
7188	18419	31220	5.56	7.0E-20	AL138120.1	EST_HUMAN	DKFZp47D082.t1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp47D082 5'
							nh4cd04.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
8841	21808	35227	9.11	7.0E-20	AA557657.1	EST_HUMAN	MER29 repetitive element;

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8841	21808	35228	9.11	7.0E-20	AA557657.1	EST_HUMAN	in46c04.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29 b2
12023	24809		8.31	7.0E-20	6912833	NT	MER29 repetitive element ;
3568	18813	29535	3.93	6.0E-20	P39188	SWISSPROT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
4301	17330	30210	2.98	6.0E-20	BE622434.1	EST_HUMAN	ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY
4628	17847		1.05	5.0E-20	AV725123.1	EST_HUMAN	601441231F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916231 5'
7322	20293	33636	1.19	5.0E-20	AF075301.1	EST_HUMAN	AV725123 HTC Homo sapiens cDNA clone HTCBA01 5'
8277	21246	34657	5	5.0E-20	W90525.1	EST_HUMAN	AF076301 Homo fetal liver cDNA library Homo sapiens cDNA clone HA0250
8277	21246	34658	5	5.0E-20	W90525.1	EST_HUMAN	zh78d08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element ;
8440	21409	34822	0.79	5.0E-20	BE165980.1	EST_HUMAN	zh78d08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element ;
9187	22153	35582	1.24	5.0E-20	AB028174.1	NT	MF3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
9187	22153	35583	1.24	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
9800	21123		0.93	5.0E-20	O60809	SWISSPROT	Mus musculus MMAN-g mRNA, complete cds
1824	14657	27636	1.73	4.0E-20	AL163247.2	NT	HYPOTHETICAL PROTEIN DJ845024.1
5732	18826		0.89	4.0E-20	Q89880	SWISSPROT	Homo sapiens chromosome 21 segment HS21C047
8258	21227		5.27	4.0E-20	AI874352.1	EST_HUMAN	HISTONE H2B C (H2B/C)
10865	23785	37286	1.9	4.0E-20	AW637489.1	EST_HUMAN	zb4g03.x1 NCI_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:22833398 3'
2149	15165	28181	0.91	3.0E-20	U03888.1	EST_HUMAN	QV3-DT0043-090200-080-c04 DT0043 Homo sapiens cDNA
4237	17286	30153	1.63	3.0E-20	P23273	SWISSPROT	Human BXP21 gene
4655	17676	30582	1.43	3.0E-20	AA037618.1	EST_HUMAN	OLFACTORY RECEPTOR-LIKE PROTEIN114
8287	22253		3.32	3.0E-20	D14547.1	NT	zh36b12.s1 Soares_pregnant_uterus_NhiHPU Homo sapiens cDNA clone IMAGE:484895 3' similar to contains L1.13 L1 repetitive element ;
10884	23606	37098	0.68	3.0E-20	BF185264.1	EST_HUMAN	Human DNA, SINE repetitive element
11024	23883		1.59	3.0E-20	P11369	SWISSPROT	601843561F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4064343 5'
11840	24723	38308	8.22	3.0E-20	AI284244.1	EST_HUMAN	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
11840	24723	38309	8.22	3.0E-20	AI284244.1	EST_HUMAN	q70d02.x1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1884803 3' similar to contains Alu repetitive element ;
12329	25130	31849	4.15	3.0E-20	BE888422.1	EST_HUMAN	q70d02.x1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1884803 3' similar to contains Alu repetitive element ;
831	13888		33.91	2.0E-20	AW303868.1	EST_HUMAN	601514180F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915522 5'
							xx24e10.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2761088 3' similar to SW:RS5_MOUSE
							P97461 40S RIBOSOMAL PROTEIN S5. ;

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1113	14157	27107	3.88	2.0E-20	AA518335.1	EST_HUMAN	hg68h09.s1 NCI_CGAP_Lp2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224068
1113	14157	27108	3.88	2.0E-20	AA518335.1	EST_HUMAN	G1224068 ORF2: FUNCTION UNKNOWN.; hg68h09.s1 NCI_CGAP_Lp2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224068
2828	13888		15.67	2.0E-20	AW303866.1	EST_HUMAN	G1224068 ORF2: FUNCTION UNKNOWN.; 3x24e10.x1 NCI_CGAP_Lp4 Homo sapiens cDNA clone IMAGE:2761038 3' similar to SW:RS5_MOUSE
4883	17998	30886	4.76	2.0E-20	Q28863	SWISSPROT	P97461 40S RIBOSOMAL PROTEIN S5.;
4883	17998	30887	4.76	2.0E-20	Q28863	SWISSPROT	ZONADHESIN PRECURSOR
8455	21424	34840	0.9	2.0E-20	AA309457.1	EST_HUMAN	ZONADHESIN PRECURSOR
9545	22508	35957	7.58	2.0E-20	D10083.1	NT	EST180328 Liver III Homo sapiens cDNA 5' end
9545	22508	35958	7.58	2.0E-20	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
12703	25714	31611	3.98	2.0E-20	H5371.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
2029	15822	28063	4.32	1.0E-20	AA281061.1	EST_HUMAN	CHR22D310 Chromosome 22 exon Homo sapiens cDNA clone C22_391 5'
4487	17493	30380	1.04	1.0E-20	BF115153.1	EST_HUMAN	z11d06.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12
7079	20100	33411	1.04	1.0E-20	AF049567.1	EST_HUMAN	MER19 repetitive element;
9518	22481	35826	2.24	1.0E-20	11418491	NT	h184508.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3135155 3' similar to contains L1.12 L1
11879	24761	38346	2.11	1.0E-20	AF223391.1	NT	repetitive element;
12458	25215		3.09	1.0E-20	AA420453.1	EST_HUMAN	AF049567 Human activated dendritic cell mRNA Homo sapiens cDNA clone GA05
2923	15981		1	9.0E-21	AJ003514.1	EST_HUMAN	Homo sapiens Autosomes Highly Conserved Protein (AHCP), mRNA
12175	25023		3.77	9.0E-21	AW898180.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
9163	22129		1.13	8.0E-21	AW674891.1	EST_HUMAN	nc60g08.r1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:745694 similar to contains L1.13 L1
11868	24748	38330	4.38	8.0E-21	AA809411.1	EST_HUMAN	repetitive element;
12342	25140		2.94	8.0E-21	O21330	SWISSPROT	AJ003514 Selected chromosome 21 cDNA library Homo sapiens cDNA clone MP1p12-BJ21
2082	15089	28116	1.59	7.0E-21	P15800	SWISSPROT	RC3-NN0088-090500-021-b03 NN0088 Homo sapiens cDNA
2082	15089	28116	1.59	7.0E-21	P15800	SWISSPROT	b630a02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2884714 5' similar to SW:NIAM_HUMAN
3716	16759	29671	0.63	7.0E-21	AL163300.2	NT	O65169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR;
4283	17312		5.22	7.0E-21	AA046502.1	EST_HUMAN	cb71f06.at NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1336835 3'
6573	19333	32800	0.81	7.0E-21	AL163218.2	NT	ATP SYNTHASE A CHAIN (PROTEIN 6)
							LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
							LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
							Homo sapiens chromosome 21 segment HS21C100
							zh67a08.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
							Homo sapiens chromosome 21 segment HS21C018

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8731	21699	35124	1.42	7.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
9024	21990	35411	11.21	7.0E-21	D14718.1	NT	Human chromosomal protein HMG1 related gene
10472	23394	36891	0.82	7.0E-21	AW868922.1	EST_HUMAN	RCO-CT0301-271199-031-F03 CT0301 Homo sapiens cDNA
11054	24017	37540	1.69	7.0E-21	AA723404.1	EST_HUMAN	zq73403.s1 Soares_fetal_heart_LNH19W Homo sapiens cDNA clone IMAGE:398981 3' similar to gb3M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN); contains THR3 OFR repetitive element;
11589	24537	38094	1.67	7.0E-21	7706688	NT	Homo sapiens PTD013 protein (PTD013), mRNA
4130	17163	30052	1.68	6.0E-21	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9491	22455		0.59	6.0E-21	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-H09 HT0454 Homo sapiens cDNA
4390	17418	30302	3.18	5.0E-21	BE968939.1	EST_HUMAN	601849871F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3933880 5'
4839	17856	30763	6.18	5.0E-21	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
6927	20151		0.92	5.0E-21	AW440894.1	EST_HUMAN	he05e10.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2818154 3'
7213	20238	33570	0.96	5.0E-21	BE856505.1	EST_HUMAN	783d11.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303573 3' similar to contains OFR.t1 OFR repetitive element;
10939	23859	37374	0.43	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
10939	23859	37376	0.43	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
12255	25081		5.38	5.0E-21	AA393574.1	EST_HUMAN	z172c04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727878 5'
1748	14777	27762	1.95	4.0E-21	AA970713.1	EST_HUMAN	cc88c08.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1573094 3' similar to TR-Q16530 Q16530 PMS3 mRNA; contains OFR.t1 OFR repetitive element;
7055	20077	33396	3.35	4.0E-21	AB019576.1	NT	Rattus norvegicus mRNA for TIM, complete cds
10139	23065	38541	0.59	4.0E-21	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
1854	14880	27876	1.05	3.0E-21	AA218991.1	EST_HUMAN	zq15c08.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:628771 3'
2282	15295	28319	1.48	3.0E-21	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3096	16153	28068	4.17	3.0E-21	AJ007973.1	NT	Homo sapiens LGMID2B gene
5577	18673	31636	0.93	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5577	18673	31637	0.93	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5828	18918		0.74	3.0E-21	AV681044.1	EST_HUMAN	AV661044 GLC Homo sapiens cDNA clone GLC0A10 3'
6303	19374		1.89	3.0E-21	BF184739.1	EST_HUMAN	601844465F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4084945 5'
7271	20006	33306	7.18	3.0E-21	BF361093.1	EST_HUMAN	RC1-OT0083-100800-019-g08 OT0083 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10061	22978	36445	0.77	3.0E-21	AW89760.1	EST_HUMAN	CM1-NN0063-280400-203-H08 NN0063 Homo sapiens cDNA
147	13280		28.45	2.0E-21	BE163247.1	EST_HUMAN	QV3-HT0458-170200-090-g12 HT0458 Homo sapiens cDNA
1219	14257		3.29	2.0E-21	BE084410.1	EST_HUMAN	RC4-BT0311-141189-011-H06 BT0311 Homo sapiens cDNA
2846	15843	28667	2.28	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2848	15843	28668	2.28	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
5661	18658	31604	1.54	2.0E-21	AI624582.1	EST_HUMAN	hs30103.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2230109 3' similar to TR:Q96854 Q96854
5658	18752	31918	0.81	2.0E-21	AA027211.1	EST_HUMAN	HYPOTHETICAL 51.1 KD PROTEIN;
5658	18752	31919	0.81	2.0E-21	AA027211.1	EST_HUMAN	ze97a12.l1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:366910 5'
6149	18224	32454	0.61	2.0E-21	W44493.1	EST_HUMAN	ze97a12.l1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:366910 5'
8815	21583	34689	0.48	2.0E-21	AJ010770.1	NT	ze28h02.l1 Soares_sarcomatous_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:323687 5'
8706	21674	35099	6.64	2.0E-21	BE141785.1	EST_HUMAN	Homo sapiens hyperion gene, exons 1-50
9175	22141	35567	3.96	2.0E-21	AU136776.1	EST_HUMAN	QV0-HT0103-091199-050-g11 HT0103 Homo sapiens cDNA
11647	24684	38152	1.72	2.0E-21	BE973829.1	EST_HUMAN	AU136779 PLACE1 Homo sapiens cDNA clone PLACE1005052 5'
11647	24684	38153	1.72	2.0E-21	BE973829.1	EST_HUMAN	601680638F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
12560	25279		17.51	2.0E-21	AF176815.1	NT	601680638F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1260	14285	27259	2.08	1.0E-21	AA557657.1	EST_HUMAN	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
1402	14435		7.17	1.0E-21	AI601284.1	EST_HUMAN	nl48c04.at NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1049718 similar to contains MER28.b2
6634	16692		2.6	1.0E-21	AL078762.1	EST_HUMAN	MER29 repetitive element;
7398	20368	33719	4.83	1.0E-21	AI228104.1	EST_HUMAN	ar68d12.x1 Barslead colon HPLR17 Homo sapiens cDNA clone IMAGE:2152343 3'
10603	23625	37021	0.46	1.0E-21	AL163203.2	NT	DKFZp4340830_l1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp4340830 5'
10603	23525	37022	0.46	1.0E-21	AL163203.2	NT	qg47e05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838336 3' similar to gb:M84241 QM
10949	23869		1.67	1.0E-21	5730038	NT	PROTEIN (HUMAN);
12832	25514		1.32	1.0E-21	AF046133.1	NT	Homo sapiens chromosome 21 segment HS21C003
4439	17465	30355	2.03	9.0E-22	AI702438.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
8951	21917	35341	1.29	9.0E-22	AL163201.2	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
8951	21917	35342	1.29	9.0E-22	AL163201.2	NT	Homo sapiens chromosome Xp22 410-8
11144	24104	37631	3.13	9.0E-22	AV761874.1	EST_HUMAN	hs294a03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2286204 3' similar to TR:Q15408 Q15408
949	14002		7.03	8.0E-22	BE144748.1	EST_HUMAN	NEUTRAL PROTEASE LARGE SUBUNIT;
8228	21197	26858	3.82	8.0E-22	AA046502.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C001
666	13731		6.78	7.0E-22	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C001

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4312	17341	30221	2.38	7.0E-22	Q61838	SWISSPROT	ALPHA-2-MACROGLOBULIN PRECURSOR (ALPHA2M)
5076	18086	30688	0.97	7.0E-22	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
9036	22004		2.46	7.0E-22	AF151054.1	NT	Homo sapiens HSPC220 mRNA, complete cds
9184	22150	35678	3.86	7.0E-22	M78660.1	EST_HUMAN	EST00738 Fetal brain, Striatum (cat#836206) Homo sapiens cDNA clone HFBGF07
9961	22888	36349	1.82	7.0E-22	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TORBV12S2 region
8584	21562		1.88	6.0E-22	AW029123.1	EST_HUMAN	wx05g07.x1 NCI CGAP Cas4 Homo sapiens cDNA clone IMAGE:2542812.3
5285	18291		0.72	5.0E-22	D14647.1	NT	Human DNA, SINE repetitive element
6688	19723	32988	3.05	5.0E-22	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10682	23604	37088	7.82	5.0E-22	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12776	25413		2.76	5.0E-22	BF476511.1	EST_HUMAN	nas27b06.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:3255688.3 similar to contains Alu repetitive element
3650	16693		0.83	4.0E-22	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8442	21411	34824	0.42	4.0E-22	AV703223.1	EST_HUMAN	AV703223 ADB Homo sapiens cDNA clone ADBAUE12.5
8756	26008		3.96	4.0E-22	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11077	24039	37563	2.15	4.0E-22	BF218030.1	EST_HUMAN	601862813F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4095434.5
12938	25518		2.74	4.0E-22	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C009
960	14013		1.06	3.0E-22	AI469878.1	EST_HUMAN	tm14h10.x1 NCI CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2166811.3 similar to gbl:19563 HIGH AFFINITY INTERLEUKIN-8 RECEPTOR B (HUMAN); contains L1.1 L1 repetitive element;
2576	15577	28596	2.15	3.0E-22	AI858038.1	EST_HUMAN	w66504.x1 NCI CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2429839.3 similar to SW:RL21_HUMAN
3686	16729		1.35	3.0E-22	D14718.1	NT	Human chromosome protein HMG1 related gene
4638	17855	30752	2.88	3.0E-22	AI080126.1	EST_HUMAN	qb28c07.x1 Soares_pregnant_uterus_NHIFU Homo sapiens cDNA clone IMAGE:1687680.3 similar to contains MIER12.12 MIER12 repetitive element;
8572	21540		1.21	3.0E-22	BE166813.1	EST_HUMAN	QV0-HT0368-090200-098-f12 HT0368 Homo sapiens cDNA
8577	21545	34984	3.4	3.0E-22	BE089841.1	EST_HUMAN	RC5-BT0707-150300-021-H10 BT0707 Homo sapiens cDNA
8703	21671	35093	0.77	3.0E-22	X60660.1	NT	R. rattus RY2G5 mRNA for a potential ligand-binding protein
8703	21671	35094	0.77	3.0E-22	X60660.1	NT	R. rattus RY2G5 mRNA for a potential ligand-binding protein
1970	14891		4.79	2.0E-22	N24942.1	EST_HUMAN	y27305.a1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:267369.3
2528	15531	28552	1.82	2.0E-22	P24916	SWISSPROT	IMMEDIATE EARLY GENE 13 PROTEIN PRECURSOR
3431	16479	28398	4.76	2.0E-22	8394043	NT	Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit (PRKAG3), mRNA
4263	17282	30163	1.26	2.0E-22	AW817794.1	EST_HUMAN	PM1-ST0282-261199-001-d12 ST0282 Homo sapiens cDNA
5861	25648	32232	1.34	2.0E-22	W39458.1	EST_HUMAN	zz-20701.1 Soares_senescent_fibroblasts_NHHSF Homo sapiens cDNA clone IMAGE:322873.5 similar to gbl:372308 MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (HUMAN);
6301	19372	32611	3.57	2.0E-22	BF092116.1	EST_HUMAN	RC0-TN0079-150900-025-h12 TN0079 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10061	22888	36456	1.61	2.0E-22	A1276522.1	EST_HUMAN	q176t09.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1878289 3' similar to contains MER29.b3 MER29 repetitive element;
10158	23081	36558	0.65	2.0E-22	AA715315.1	EST_HUMAN	in04h11.a1 NCI_OGAP_P22 Homo sapiens cDNA clone IMAGE:1218289 3'
10158	23081	36557	0.65	2.0E-22	AA715315.1	EST_HUMAN	in04h11.a1 NCI_OGAP_P22 Homo sapiens cDNA clone IMAGE:1218289 3'
10891	23911	37426	0.55	2.0E-22	R16209.1	EST_HUMAN	y68c09.r1 Soares Infant brain INIB Homo sapiens cDNA clone IMAGE:29740 5'
12054	24927	38525	1.58	2.0E-22	AW418960.1	EST_HUMAN	ha2404.x1 NCI_OGAP_K1412 Homo sapiens cDNA clone IMAGE:2874655 3'
12139	25504	31705	1.02	2.0E-22	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1898	14921	27817	1.76	1.0E-22	AW865517.1	EST_HUMAN	PM4-SN0020-010400-008-h02 SN0020 Homo sapiens cDNA
2583	15589	28806	1.82	1.0E-22	U90871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
3422	18470	28390	1.49	1.0E-22	D14547.1	NT	Human DNA, SINE repetitive element
5295	18300		1.5	1.0E-22	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
8016	20963	34347	0.95	1.0E-22	BE084667.1	EST_HUMAN	MRO-BT0659-220200-002-h07 BT0659 Homo sapiens cDNA
10918	23838	37354	0.8	1.0E-22	A1365435.1	EST_HUMAN	q208b07.x1 NCI_OGAP_CLL1 Homo sapiens cDNA clone IMAGE:2020881 3' similar to contains MER29.b2 MER29 repetitive element;
10918	23838	37355	0.8	1.0E-22	A1365435.1	EST_HUMAN	q208b07.x1 NCI_OGAP_CLL1 Homo sapiens cDNA clone IMAGE:2020881 3' similar to contains MER29.b2 MER29 repetitive element;
12891	25551		0.05	9.0E-23	AW802801.1	EST_HUMAN	IL2-UM0076-070400-061-F11 UM0076 Homo sapiens cDNA
3585	16830	29548	0.73	8.0E-23	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3322	16373		1.66	7.0E-23	AV847246.1	EST_HUMAN	AV847246 GLC Homo sapiens cDNA clone GLCAW07 3'
11376	24323	37852	4.11	7.0E-23	5031852	NT	Homo sapiens Ndc58 (D. melanogaster)-like protein (NDC58L) mRNA
3447	16494		1.68	6.0E-23	AF198333.1	NT	Rattus norvegicus RIM1B (Rim1B) mRNA, complete cds
4297	17326	30206	1.13	6.0E-23	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
12281	25099	31834	4.64	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12281	25099	31835	4.64	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12480	25228	31795	3.03	6.0E-23	A1209130.1	EST_HUMAN	q158c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839460 3' similar to SW-MV10_MOUSE P23249 PROTEIN MOV-10.;
5519	18618	31552	4	5.0E-23	U82671.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and Lp
6367	25659	32678	3.55	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
7671	25659	32679	3.25	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6580	19840	32906	1.07	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
6580	19840	32907	1.07	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8171	21141	34547	4.18	3.0E-23	AA130185.1	EST_HUMAN	z35g08.r1 Soares_pregnant_uterus_Nbt-IPU Homo sapiens cDNA clone IMAGE:503968 5' similar to
9304	22608	36058	2.74	3.0E-23	Z70364.1	NT	contains MER29.12 MER29 repetitive element ;
9304	22608	36059	2.74	3.0E-23	Z70364.1	NT	Human endogenous retroviral element HC2
10580	23602		1.27	3.0E-23	AW897927.1	EST_HUMAN	Human endogenous retroviral element HC2
667	13732	26657	3.75	2.0E-23	AJ269880.1	NT	RC3-NN0066-270400-011-101 NN0066 Homo sapiens cDNA
1145	15917		3.02	2.0E-23	M55270.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZ1FL1 gene
2807	15799	28817	2.08	2.0E-23	P22105	SWISSPROT	Human matrix Gla protein (MGP) gene, complete cds
2807	15799	28818	2.08	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
							TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
3394	18433		1.5	2.0E-23	AI201458.1	EST_HUMAN	qs73f11.x1 NCI_CGAP_P228 Homo sapiens cDNA clone IMAGE:1943757 3' similar to TR-Q13537 Q13537
3729	16771		2.97	2.0E-23	BE166980.1	EST_HUMAN	MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
4001	17040	29947	2.59	2.0E-23	H59931.1	EST_HUMAN	MP3-HT0487-160200-113-g01 HT0487 Homo sapiens cDNA
4001	17040	29948	2.59	2.0E-23	H59931.1	EST_HUMAN	Yr16a02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
5082	18072	30952	8.49	2.0E-23	D14547.1	NT	Yr16a02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
							Human DNA, SINE repetitive element
8205	21175		4.28	2.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
9195	22161	35589	1.12	2.0E-23	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
12262	25088		3.91	2.0E-23	M32658.1	NT	Human alcohol dehydrogenase gamma subunit (ADH3) gene, exon 1
12787	25419		2.55	2.0E-23	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
4558	17681	30472	1.44	1.0E-23	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
4789	17816		4.76	1.0E-23	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6882	19934		3.11	1.0E-23	BE378471.1	EST_HUMAN	601238455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608663 5'
8699	21897	35060	4.73	1.0E-23	AA448097.1	EST_HUMAN	zaf2208.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:762688 5' similar to contains PTR5.12
							PTR5 repetitive element ;
554	19824		3.05	9.0E-24	AA663213.1	EST_HUMAN	ab75a06.s1 Stratiogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:952758 3' similar to
4678	17689	30588	1.15	8.0E-24	P23269	SWISSPROT	TR-E19822 E19822 CA PROTEIN. ;
4678	17689	30587	1.15	8.0E-24	P23269	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3
6591	19651	32922	1.34	8.0E-24	11422027	NT	OLFACTORY RECEPTOR-LIKE PROTEIN I3
8155	21083	34492	0.77	8.0E-24	11422027	NT	Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA
							Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3888	16928		1.36	7.0E-24	AW937854.1	EST_HUMAN	QV0-DT0047-170200-122-c08 DT0047 Homo sapiens cDNA
707	13768		2.31	6.0E-24	AB001421.1	NT	Macaca fuscata mRNA for Testis-Specific Protein Y (TSPY), complete cds
839	13896	26851	15.68	6.0E-24	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
3894	17034	28942	8.31	5.0E-24	AJ228043.1	NT	Homo sapiens 859 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
8034	20971	34986	1.34	5.0E-24	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6039	19121	32326	3.63	4.0E-24	AA684178.1	EST_HUMAN	m31H05.s1 NC1 CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1085528 3' similar to SW:POL_MLVK
9029	21886	35415	1.28	4.0E-24	AW813711.1	EST_HUMAN	P31785 POL POLYPROTEIN;
11514	24455	38005	1.52	4.0E-24	BE54822.1	EST_HUMAN	RC3-ST0187-130100-014-406 ST0197 Homo sapiens cDNA
12644	25328	31780	5.58	4.0E-24	AB028016.1	NT	601078812F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464498 5'
12807	25713	31610	9.62	4.0E-24	M20707.1	NT	Homo sapiens mRNA for KIAA1083 protein, partial cds
12876	25508	31708	1.88	4.0E-24	11418318	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
7285	20082	33368	0.6	3.0E-24	U68061.1	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
7285	20082	33368	0.6	3.0E-24	U68061.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
7285	20082	33368	0.6	3.0E-24	U68061.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
8766	21733		2.89	3.0E-24	AW614871.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
8822	21789		1.25	3.0E-24	AW962076.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
9820	22668	36126	4.11	3.0E-24	AL163252.2	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
12715	25368	31772	2.16	3.0E-24	BF127762.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
2354	15363	28385	2.8	2.0E-24	AA167539.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
3912	16952		0.89	2.0E-24	AW898189.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
7583	26001		0.61	2.0E-24	AL163209.2	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
7715	20672	34039	1.12	2.0E-24	AF088824.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
7720	20677	34042	0.55	2.0E-24	AJ003538.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
8082	22058	35484	3.09	2.0E-24	AL118158.1	EST_HUMAN	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV16S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9130	22086		0.98	2.0E-24	H69214.1	EST_HUMAN	y92609.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212728 5' similar to contains
10213	23138	36626	0.98	2.0E-24	A1521759.1	EST_HUMAN	MER28 repetitive element;
10213	23138	36627	0.98	2.0E-24	A1521759.1	EST_HUMAN	U77609.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
12688	26947		10.03	2.0E-24	M28677.1	NT	U77609.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
1705	14735	27717	2.63	1.0E-24	7706340	NT	Human O family dispersed repeat element
2681	15677		1.52	1.0E-24	AW820194.1	EST_HUMAN	Homo sapiens CGI-127 protein (LOC51846), mRNA
3033	16091		0.78	1.0E-24	D88423.1	NT	QV0-S10294-100400-185-c10 ST0294 Homo sapiens cDNA
4269	17328		2	1.0E-24	AF143313.1	NT	Mus musculus mRNA for HGT keratin, partial cds
6541	19603	32865	0.89	1.0E-24	7108338	NT	Homo sapiens PTEN (PTEN) gene, exon 2
7796	20749	34123	3.96	1.0E-24	AL163303.2	NT	Mus musculus keratin complex-1, gene C29 (Krt1-c29), mRNA
8002	20941	34334	0.88	1.0E-24	BE144526.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
8276	21245	34656	1.81	1.0E-24	AW901164.1	EST_HUMAN	MRO-HT0168-271199-005-009 HT0168 Homo sapiens cDNA
8629	19663	32861	0.52	9.0E-25	11420402	NT	CMD-NIN1010-130300-281-d07 NN1010 Homo sapiens cDNA
12008	24885	38480	1.53	9.0E-25	7706707	NT	Homo sapiens helicase-like protein NHL (LOC51750), mRNA
							Homo sapiens putative secreted protein (SIG11), mRNA
							ne92a10.s1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:911754 similar to contains MER1.b2
5031	18045	30927	2.85	7.0E-25	AA483944.1	EST_HUMAN	MER1 repetitive element;
							ne08a09.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains TH-R.b2 THR
8561	21529	34949	6.63	7.0E-25	AA468646.1	EST_HUMAN	repetitive element;
							ne25106.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914843 similar to SW.F14A_YEAST
12012	24889	38486	3.24	7.0E-25	AA583540.1	EST_HUMAN	P38105 PROBABLE 60S RIBOSOMAL PROTEIN L14EA.;
7184	19415		4.41	6.0E-25	W87623.1	EST_HUMAN	zh65h07.r1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:416889 5'
7882	20931	34326	10.26	6.0E-25	7305360	NT	Mus musculus otogelin (Otog), mRNA
1658	14691	27667	1.67	5.0E-25	AW650271.1	EST_HUMAN	IL3-CT0219-161199-031-D04 CT0219 Homo sapiens cDNA
							cu46f01.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1631161 3' similar to contains Alu repetitive
5168	16192		0.92	5.0E-25	AA994228.1	EST_HUMAN	element;
11645	24982	39150	3.16	5.0E-25	AW979107.1	EST_HUMAN	EST391217 MAGE sequences, MAGP Homo sapiens cDNA
1441	14474	27451	2.3	4.0E-25	T98107.1	EST_HUMAN	ye56f04.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121783 5'
3419	16461		2.68	4.0E-25	AW887671.1	EST_HUMAN	PMS-OT0063-280200-001-g07 OT0063 Homo sapiens cDNA
3923	16963	29876	0.93	4.0E-25	AF000368.1	NT	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
4345	17372		3.13	4.0E-25	BE170957.1	EST_HUMAN	QV3-HT0543-140400-149-e11 HT0543 Homo sapiens cDNA
3331	16382	29303	2.77	3.0E-25	8923321	NT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
3331	16382	29304	2.77	3.0E-25	8923321	NT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
5877	18966	32157	0.64	3.0E-25	U53212.1	NT	Human degenerate channel MDEG mRNA, partial cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6789	19824	33107	0.68	3.0E-25	AA003590.1	EST_HUMAN	np27002.s1 NCL_CGAP_P22 Homo sapiens cDNA clone IMAGE:1117515 3' similar to gb:M81866 ZINC FINGER PROTEIN 85 (HUMAN);
8680	21848	35070	4.08	3.0E-25	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1350	14385	27354	2.6	2.0E-25	5032168	NT	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
2317	15328	28551	7.52	2.0E-25	BE888018.1	EST_HUMAN	601611630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
2842	15551	28572	3.35	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4218	17247	30131	1.98	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4218	17247	30132	1.98	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
10123	23049	36528	2.03	2.0E-25	AL449573.1	EST_HUMAN	AL449573 Homo sapiens Testis (Starwides GS) Homo sapiens cDNA
364	13450	26378	1.4	1.0E-25	AL040229.1	EST_HUMAN	DKFZp434H0313.J1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434H0313 5'
1253	14289		1.34	1.0E-25	8635487	NT	Human endogenous retrovirus, complete genome
2441	15448	28468	1.04	1.0E-25	Q06055	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4895	17912	30802	2.33	1.0E-25	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-h09 HT0454 Homo sapiens cDNA
6719	19775		0.83	1.0E-25	AA189080.1	EST_HUMAN	z44506.s1 Striatum HNT neuron (#837235) Homo sapiens cDNA clone IMAGE:632827 3' similar to contains Alu repetitive element;
8965	25878	33516	3.22	1.0E-25	AA582680.1	EST_HUMAN	nm54H11.s1 NCL_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1087749 3'
8246	21215	34823	4.36	1.0E-25	AA709079.1	EST_HUMAN	z86904.s1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:384822 3' similar to contains
9804	22856	36317	0.69	1.0E-25	X60660.1	NT	PTR5.B3 PTR5 repetitive element;
9804	22856	36318	0.69	1.0E-25	X60660.1	NT	R.rattus RY235 mRNA for a potential ligand-binding protein
11316	24286	37764	2.91	1.0E-25	U93163.1	NT	R.rattus RY235 mRNA for a potential ligand-binding protein
12278	25097	38180	1.47	1.0E-25	D14547.1	NT	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
12278	25097	38181	1.47	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
13053	26591		1.83	1.0E-25	X51755.1	NT	Human DNA, SINE repetitive element
2491	15494	28519	1.47	9.0E-26	AL163218.2	NT	Human lamda-immunoglobulin constant region complex (germline)
5778	18870		1.58	8.0E-26	D14547.1	NT	Homo sapiens chromosome 21 segment HS21C018
1580	14613	27686	2.88	7.0E-26	AF003528.1	NT	Human DNA, SINE repetitive element
4005	17044	28852	1.21	7.0E-26	X89211.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4188	17217	30103	1.68	7.0E-26	AW340163.1	EST_HUMAN	H.sapiens DNA for endogenous retroviral like element
5721	18816	31894	0.72	7.0E-26	AL163202.2	NT	Hs02612.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2508368 3'
11978	24855		8.08	7.0E-26	AA115895.1	EST_HUMAN	Hs02612.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2508368 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2234	15248	28272	2.28	6.0E-26	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
3357	16407	28328	1.03	6.0E-26	AA206131.1	EST_HUMAN	z652h04.f1 Stratiogene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:845271 5'
11990	24867	38482	1.91	6.0E-26	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1181	14222	27178	1.88	5.0E-26	AJ708235.1	EST_HUMAN	ss38h08.x1 Barslead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2318519 3' similar to WP:F49C12.11 CE03371;
1181	14222	27179	1.88	5.0E-26	AJ708235.1	EST_HUMAN	ss38h08.x1 Barslead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2318519 3' similar to WP:F49C12.11 CE03371;
1546	14579		0.86	4.0E-26	AA328548.1	EST_HUMAN	EST33446 Embryo, 12 week II Homo sapiens cDNA 5' and
9767	22708		3.77	4.0E-26	7657670	NT	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
11022	23887	37614	2.93	4.0E-26	BE269187.1	EST_HUMAN	601191345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535210 5'
1773	14902	27787	2.19	3.0E-26	D14547.1	NT	Human DNA, SINE repetitive element
2019	15040	28051	1.27	3.0E-26	AL048858.2	EST_HUMAN	DKFZp434i086_r1_434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434i086 5'
2047	15066		3.69	3.0E-26	AA115886.1	EST_HUMAN	z130d08.r1 Stratiogene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:648943 5' similar to gb:MH4338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
3791	16832	29738	1.12	3.0E-26	AA152464.1	EST_HUMAN	z30f010.r1 Stratiogene colon (#837204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G885374
3791	16832	29739	1.12	3.0E-26	AA152464.1	EST_HUMAN	G885374 THYROID RECEPTOR INTERACTOR ;
7096	20030	33334	6.22	3.0E-26	BF245458.1	EST_HUMAN	601864963F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:4083278 5'
11894	24775	38361	2.03	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
11894	24775	38362	2.03	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
11928	24809	38404	4.91	3.0E-26	AA583173.1	EST_HUMAN	m37405.s1 NCI_CGAP_GC5 Homo sapiens cDNA clone IMAGE:1086057 3' similar to contains OFR.t1
13101	26824	31678	1.37	3.0E-26	AF165520.1	NT	OFR repetitive element ;
882	13745	28672	10.08	2.0E-26	AL163282.2	NT	Homo sapiens parathion I protein (PBI) mRNA, complete cds
1894	14909		3.56	2.0E-26	AL038089.2	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
3245	16300	28225	4.82	2.0E-26	X86694.1	NT	DKFZp566L171_s1_566 (synonym: hlfid2) Homo sapiens cDNA clone DKFZp566L171 3'
11105	24065		2.38	2.0E-26	D87675.1	NT	M.musculus mRNA for astrocytic phosphoprotein, PEA-15
11553	24403	38049	2.55	2.0E-26	AB01412.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
11748	24633		1.78	2.0E-26	AF055068.1	NT	tc89a01.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2185416 3' similar to contains Alu
12097	24968	38565	1.64	2.0E-26	M32788.1	NT	repetitive element; contains element MER20 MER20 repetitive element ;
12388	25168		1.7	2.0E-26	AB037859.1	NT	Human endogenous retroviral element S71
							Homo sapiens mRNA for KIAA1438 protein, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
137	13242	28172	37.48	1.0E-26	BE170371.1	EST_HUMAN	QV4HT0538-020300-123-602 HT0538 Homo sapiens cDNA
2063	15081	28100	1.33	1.0E-26	AL038363.2	EST_HUMAN	DKFZp434H1910_r1_434 (synonym: hncs3) Homo sapiens cDNA clone DKFZp434H1910 5'
2697	15693		11.4	1.0E-26	AF261085.1	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPDH) mRNA, complete cds
7016	20142		2.79	1.0E-26	BE165980.1	EST_HUMAN	MR3-HT0487-150200-119-g01 HT0487 Homo sapiens cDNA
11239	24182		2.12	1.0E-26	AL038487.1	EST_HUMAN	DKFZp568C2146_r1_568 (synonym: hnf42) Homo sapiens cDNA clone DKFZp568C2146 5'
12630	25968		2.65	1.0E-26	H55036.1	EST_HUMAN	CHR220032 Chromosome 22 exon Homo sapiens cDNA clone C22_45 5'
7837	20784		1.24	9.0E-27	BF371227.1	EST_HUMAN	RC9-FN0138-110800-022-A02 FN0138 Homo sapiens cDNA
9658	22815		4.04	9.0E-27	U83163.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds
12142	25008		5.95	9.0E-27	BF445558.1	EST_HUMAN	hsad3c07.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3253844 3' similar to contains OFRL1
11	13131	28029	4.71	8.0E-27	A831462.1	EST_HUMAN	OFRL repetitive element;
559	13629		4.61	8.0E-27	AL163227.2	NT	wf46c04.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THRb2
1414	14447	27419	30.06	8.0E-27	AW162737.1	EST_HUMAN	THR repetitive element;
1414	14447	27420	30.06	8.0E-27	AW162737.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
2177	15192	28214	1.1	8.0E-27	AW864776.1	EST_HUMAN	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gbX00558
3189	16254	29174	1.17	8.0E-27	P12236	SWISSPROT	TUBULIN ALPHA-1 CHAIN (HUMAN);
3384	18414	28339	0.84	8.0E-27	AF181897.1	NT	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gbX00558
5779	18871	32053	0.97	8.0E-27	AV732214.1	EST_HUMAN	TUBULIN ALPHA-1 CHAIN (HUMAN);
7170	18401		2.12	8.0E-27	BE928660.1	EST_HUMAN	PM2-SN0018-220300-002-d07 SN0018 Homo sapiens cDNA
7248	19983	33280	2.41	8.0E-27	N84970.1	EST_HUMAN	ADP-ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE
9564	22528	35975	1.41	8.0E-27	AW857579.1	EST_HUMAN	NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
9564	22528	35976	1.41	8.0E-27	AW857579.1	EST_HUMAN	Homo sapiens WRN (WRN) gene, complete cds
684	13747		1.65	7.0E-27	Z70684.1	NT	AV732214 HTF Homo sapiens cDNA clone HTFBC808 5'
5126	18135		2.05	7.0E-27	AW629172.1	EST_HUMAN	MR4-BT0398-250800-204-d09 BT0398 Homo sapiens cDNA
8208	22176		0.98	7.0E-27	D86984.1	NT	J1751F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J1751 5' similar to
11101	24061		3.24	7.0E-27	AJ271735.1	NT	REPEATITIVE ELEMENT L1
12759	25402		1.54	7.0E-27	AV723365.1	EST_HUMAN	CM1-CT0315-091299-063-d07 CT0315 Homo sapiens cDNA
							CM1-CT0315-091299-063-d07 CT0315 Homo sapiens cDNA
							Human endogenous retroviral element HC2
							h51h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2975879 3' similar to TR-O76040
							O76040 ORF2: FUNCTION UNKNOWN. ;
							Human mRNA for KIAA0231 gene, partial cds
							Homo sapiens Xq pseudautosomal region; segment 1/2
							AV723365 HTB Homo sapiens cDNA clone HTBAHE02 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11080	24042	37685	10.71	6.0E-27	M28887.1	NT	Human nuclear protein (B23) mRNA, complete cds
8055	20892		0.79	5.0E-27	AL163039.2	NT	Homo sapiens chromosome 21 segment HS21C103
10587	23519	37010	3.37	5.0E-27	BF688814.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
10587	23519	37011	3.37	5.0E-27	BF688814.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
6908	19960	33256	1.72	4.0E-27	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
8271	21240		1.22	4.0E-27	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8316	21285		1.26	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10101	23027	36504	0.72	4.0E-27	AW880859.1	EST_HUMAN	QVQ-OT0033-070300-152-b10 OT0033 Homo sapiens cDNA
11928	24810	38405	1.98	4.0E-27	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2057	15076	28036	4.38	3.0E-27	X60668.1	NT	R. rattus RYA3 mRNA for a potential ligand-binding protein
4300	17329	30209	1.08	3.0E-27	BE071924.1	EST_HUMAN	PMO-BT0527-090100-001-d11 BT0527 Homo sapiens cDNA
5419	18522	31400	5.68	3.0E-27	AA077705.1	EST_HUMAN	7B44C08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B44C08
8089	21025	34424	0.57	3.0E-27	BE670361.1	EST_HUMAN	7e33f02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284283 3'
9690	22817	36271	4.46	3.0E-27	BF035327.1	EST_HUMAN	60148831F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862066 5'
43	13163	26066	9.25	2.0E-27	AF054187.1	NT	Homo sapiens alpha NAC mRNA, complete cds
1911	14935		24.32	2.0E-27	AA565345.1	EST_HUMAN	nk01b10.a1 NCI_CGAP_Pr11 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886 60S
3128	16183		10.81	2.0E-27	AW629172.1	EST_HUMAN	ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);
3238	16293	28215	1.61	2.0E-27	AF111167.2	NT	h151h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2975879 3' similar to TR:O76040
3238	16293	28216	1.61	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
6833	19886	33179	0.72	2.0E-27	H02655.1	EST_HUMAN	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
8427	21398	34807	1.44	2.0E-27	A1888347.1	EST_HUMAN	Y86e01.1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:150840 5' similar to SP-HMGC_MOUSE Q02591 HOMEBOX PROTEIN ;
9824	22568		2.61	2.0E-27	AA551527.1	EST_HUMAN	w28g07.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2426268 3'
10151	23076	36552	0.78	2.0E-27	X60668.1	NT	h108h05.a1 NCI_CGAP_Try1 Homo sapiens cDNA clone IMAGE:943737 similar to contains L1 IS L1
10395	23317	36797	1.32	2.0E-27	M78590.1	EST_HUMAN	repetitive element ;
10395	23317	36798	1.32	2.0E-27	M78590.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
11302	24252	37778	2.97	2.0E-27	AU121685.1	EST_HUMAN	ESTT00738 Fetal brain, Strabagene (cat#036206) Homo sapiens cDNA clone HFBCF07
11816	14935		19.93	2.0E-27	AA565345.1	EST_HUMAN	ESTT00738 Fetal brain, Strabagene (cat#036206) Homo sapiens cDNA clone HFBCF07
							AU121685 MAMMA1 Homo sapiens cDNA clone MAMMA1000746 5'
							nk01b10.a1 NCI_CGAP_Pr11 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886 60S
							ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
436	13510		2.28	1.0E-27	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
998	14049	27002	1.58	1.0E-27	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1707	14738	27720	0.95	1.0E-27	4827059	NT	Homo sapiens xylulokinase (H. Influenzae) homolog (X1LB) mRNA
4108	17142		1.08	1.0E-27	BE350127.1	EST_HUMAN	h08g01.x1 NC1 CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.B3
6894	19751	33028	5.21	1.0E-27	6005855	NT	MER29 repetitive element;
7054	20078	33384	2.01	1.0E-27	F30158.1	EST_HUMAN	Homo sapiens Retha-derived POU-domain factor-1 (RPF-1), mRNA
7054	20078	33385	2.01	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
8957	21923	33351	0.71	1.0E-27	AB007923.1	NT	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
9337	22302		2.33	1.0E-27	BE079780.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
10080	23007	36478	2.7	1.0E-27	D87449.1	NT	RC8-BT0627-140200-011-E08 BT0627 Homo sapiens cDNA
12016	24893	38490	3.73	1.0E-27	AF111093.1	NT	Human mRNA for KIAA0280 gene, partial cds
143	13245		2.16	9.0E-28	BE348399.1	EST_HUMAN	Bos taurus letraphilin 3 splice variant b2b1 mRNA, complete cds
311	13403	28329	2.64	9.0E-28	AU126280.1	EST_HUMAN	hwt7c11.x1 NC1 CGAP_LJ24 Homo sapiens cDNA clone IMAGE:3163186 3' similar to TR:Q07314 Q07314
4817	17834	30732	1.08	9.0E-28	P50447	SWISSPROT	SECRETED NEUREXIN III-ALPHA-C PRECURSOR. [9] TR:Q07280 TR:Q07313;
12222	25059		3.71	9.0E-28	BF377859.1	EST_HUMAN	AU126280 NT2RP1 Homo sapiens cDNA clone NT2RP1000443 5'
12553	25817		1.9	8.0E-28	AW157571.1	EST_HUMAN	ALPHA-1-ANTITRYPSIN PRECURSOR (ALPHA-1 PROTEASE INHIBITOR) (ALPHA-1-ANTITRYPSINASE)
1185	14228	27182	8.98	7.0E-28	AU142750.1	EST_HUMAN	CM2-TN0140-070800-372-g01 TN0140 Homo sapiens cDNA
11520	24481	38012	2.43	7.0E-28	11417868	NT	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to TR:O60302 O60302 KIAA0555 PROTEIN. ;contains element MER22 repetitive element;
12181	25028		2.98	7.0E-28	AV755348.1	EST_HUMAN	AU142750 Y79AA1 Homo sapiens cDNA clone Y79AA1000824 5'
9271	22237		1.09	6.0E-28	AF016052.1	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
12808	25433		3.82	6.0E-28	AA504562.1	EST_HUMAN	AV755348 CB Homo sapiens cDNA clone CBFAKA12 5'
318	13410		3.1	5.0E-28	A0921003.1	EST_HUMAN	Homo sapiens zinc finger protein ZNF191 (ZNF191) gene, complete cds
4035	17073	28973	1.52	5.0E-28	R79782.1	EST_HUMAN	aa60e03.r1 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825340 5' similar to contains Alu repetitive element;contains element PTR5 repetitive element;
2633	15632	28957	1.48	4.0E-28	AW196068.1	EST_HUMAN	w018c07.x1 NC1 CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455692 3' similar to contains THR.b1
2889	16047	28967	1.18	4.0E-28	4505316	NT	THR repetitive element;
3125	16182	28092	1.93	4.0E-28	BE409100.1	EST_HUMAN	y08f10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:146443 5'
							x033c09.x1 NC1 CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2685504 3' similar to SW:GG95_HUMAN
							Q06379 GOLGIN-65. ;
							Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
							B01300703P1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3035305 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7551	20514	33872	2.45	4.0E-28	AJ198941.1	EST_HUMAN	q166f10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1765019 3' similar to gb:M19603 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
11213	24166		3.51	4.0E-28	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
11349	24299		38.65	4.0E-28	AB038241.1	NT	Felis catus GAPDH mRNA for glyceraldehyde-3-phosphate dehydrogenase, complete cds
11364	20514	33872	3.87	4.0E-28	AJ198941.1	EST_HUMAN	q166f10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1765019 3' similar to gb:M19603 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
12599	25301		1.88	4.0E-28	AW854244.1	EST_HUMAN	RC3-CT0284-240400-210-f12 CT0284 Homo sapiens cDNA
1288	14323		2.61	3.0E-28	AF155382.1	NT	Homo sapiens metalloproteinase-like, disintegrin-like, cysteine-rich protein 2 epsilon (ADAM22) mRNA, complete cds
8178	22145	35572	1.94	3.0E-28	BF354030.1	EST_HUMAN	MR3-HT0713-280500-013-f09 HT0713 Homo sapiens cDNA
11282	24232	37798	2.14	3.0E-28	U53588.1	NT	Homo sapiens MHC class 1 region
12628	25315		2.92	3.0E-28	A1831991.1	EST_HUMAN	wj9807.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410885 3' similar to contains Alu repetitive element; contains element HGR repetitive element;
89	13205	26128	11.84	2.0E-28	BE082167.1	EST_HUMAN	RC1-BT0264-220300-019-c05 BT0264 Homo sapiens cDNA
1047	14093	27045	4.14	2.0E-28	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
1168	14210	27164	12.37	2.0E-28	Y11107.3	NT	Homo sapiens integrin beta 4 subunit, exons 3-41
2485	15489	28513	2.27	2.0E-28	A1848634.1	EST_HUMAN	q33508.x1 NCI_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1910483 3' similar to contains L1.b2 L1 repetitive element;
3373	18423	28348	0.78	2.0E-28	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
6440	19505	32756	1.48	2.0E-28	BF224402.1	EST_HUMAN	hr78-03.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3134404 3' similar to contains LOR1.b1 LOR1 repetitive element;
6464	19529		6.48	2.0E-28	BF212805.1	EST_HUMAN	601814196f1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4048751 5'
8379	21348	34780	0.78	2.0E-28	AF005273.1	NT	Sus scrofa domestica submandibular apomucin mRNA, complete cds
8943	22870		8.68	2.0E-28	AW972305.1	EST_HUMAN	EST1984394 MAGE resequences, MAGEC1 Homo sapiens cDNA
11936	24817	38414	1.92	2.0E-28	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12609	26308		2.06	2.0E-28	H06376.1	EST_HUMAN	y79c09.t1 Soares Infant brain INIB Homo sapiens cDNA clone IMAGE:44300 5'
1474	14507	27481	3.15	1.0E-28	D38044.1	NT	Human gene for Ah-receptor, exon 7-9
2229	15243	28268	1.84	1.0E-28	BF333236.1	EST_HUMAN	QV1-BT0821-120900-360-503 BT0821 Homo sapiens cDNA
2692	15688	28705	0.92	1.0E-28	AF000695.1	NT	Homo sapiens ubiquitous TPR motif, Y isoform (UTY) mRNA, alternative transcript 2, complete cds
4985	18000	30889	0.64	1.0E-28	AV732194.1	EST_HUMAN	Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC83061), mRNA
8193	21163		8.03	1.0E-28	11429885	NT	Homo sapiens hypothetical protein FLJ10968 (FLJ10968), mRNA
8352	21321		3.37	1.0E-28	8822793	NT	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9833	22577	36027	4.47	1.0E-28	AA308744.1	EST_HUMAN	EST179615 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to similar to retroviral LTR
10235	23160	36648	6.47	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
10235	23160	36649	6.47	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
12186	25033		4.38	1.0E-28	AA054182.1	EST_HUMAN	z51c01.11 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:380448 5'
12831	25716		2.58	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
13037	25918	31302	3.46	9.0E-29	AW663987.1	EST_HUMAN	h17g08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978266 3'
12713	25367		3.12	8.0E-29	Q00130	SWISSPROT	HYPOTHETICAL GENE 50 PROTEIN
1606	14638	27616	1.04	7.0E-29	AW968447.1	EST_HUMAN	EST378521 IMAGE resequences, MAGI Homo sapiens cDNA
3564	16610		0.9	7.0E-29	BE254708.1	EST_HUMAN	601114890F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355357 5'
13088	25616		9.37	7.0E-29	AJ132352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
597	13664	26678	6.67	6.0E-29	A1836748.1	EST_HUMAN	wp68601.x1 NC1_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2466885 3' similar to TR-O15475
12489	25234		8.12	6.0E-29	BE940436.1	EST_HUMAN	O15475 UNNAMED_HIERV-H1 PROTEIN ; contains LTR7.b1 LTR7 repetitive element ;
12574	25284		1.97	6.0E-29	BF668087.1	EST_HUMAN	RC3-UT0062-210800-021-c05 UT0062 Homo sapiens cDNA
5033	18047		1.34	5.0E-29	AL163203.2	NT	602184092F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300079 5'
9083	22049		8.5	5.0E-29	AW887541.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
3248	16301		1.33	4.0E-29	A1752397.1	EST_HUMAN	RC3-OT0081-170300-011-c12 OT0081 Homo sapiens cDNA
6125	19203		5.91	4.0E-29	BE164830.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC.cn15c02 random
8417	21398	34784	0.82	4.0E-29	A1678101.1	EST_HUMAN	QV1-HT0471-280300-121-c05 HT0471 Homo sapiens cDNA
9417	21398	34795	0.92	4.0E-29	A1678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
9097	22063	35488	2.97	4.0E-29	J04688.1	NT	MER28.12 MER28 repetitive element ;
2379	15387	28411	0.94	3.0E-29	U87847.1	NT	wd35g08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
4444	17470	30359	1.61	3.0E-29	AB042297.1	NT	MER28.12 MER28 repetitive element ;
4764	17784	30680	0.94	3.0E-29	BF333238.1	EST_HUMAN	Human 90 kD heat shock protein gene, complete cds
6040	19122	32327	0.77	3.0E-29	BE314018.1	EST_HUMAN	Human beta-galactoside alpha2,6-sialyltransferase (SIAT1) mRNA, exon U
9085	22051	35473	2.19	3.0E-29	D38044.1	NT	Homo sapiens PTS gene for 8-pyruvyltetrahydropterin synthase, complete cds
9655	22598	36047	1.97	3.0E-29	AW303317.1	EST_HUMAN	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
9889	22842		2.2	3.0E-29	AL163246.2	NT	601162657F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508527 5'
							Human gene for Ah-receptor, exon 7-9
							xv1703.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu
							repetitive element; contains MER19.12 MER19 repetitive element ;
							Homo sapiens chromosome 21 segment HS21C048

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10318	23242		0.73	3.0E-28	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:31462568 3' similar to contains MER28.b3
12385	25163		2.34	3.0E-28	D63882.1	NT	MER28 repetitive element;
493	13585	28487	1.88	2.0E-28	AF084889.1	NT	Human HsLM15 mRNA for HsLM15, complete cds
493	13585	28488	1.88	2.0E-28	AF084889.1	NT	Homo sapiens envelope protein RIC-8 (env) gene, complete cds
1535	14588	27538	7.19	2.0E-28	AI863804.1	EST_HUMAN	Homo sapiens envelope protein RIC-8 (env) gene, complete cds
1535	14588	27539	7.19	2.0E-28	AI863804.1	EST_HUMAN	wr65d10.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:24925563 3' similar to TR-O15548 O15548
4308	17337	30215	2.4	2.0E-28	AL163288.2	NT	HERV-E ENVELOPE GLYCOPROTEIN;
5251	18259	31128	0.99	2.0E-28	O94827	SWISSPROT	HERV-E ENVELOPE GLYCOPROTEIN;
5924	18010	32203	1.08	2.0E-28	AI882459.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C008
6304	19375	32613	1.22	2.0E-28	AI806418.1	EST_HUMAN	POTENTIAL PHOSPHOLIPID-TRANSPORTING ATPASE VA
7808	19375	32613	1.18	2.0E-28	AI806418.1	EST_HUMAN	os71e04.x1 NCL_CGAP_GC22 Homo sapiens cDNA clone IMAGE:1610814 3' similar to contains L1.12 L1
8309	21278	34890	1.04	2.0E-28	BE867157.1	EST_HUMAN	repetitive element;
8924	21890	36317	0.83	2.0E-28	10567821	NT	wf27g07.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:23568860 3' similar to contains
8924	21890	36318	0.83	2.0E-28	10567821	NT	element MER6 repetitive element;
9868	22802	36255	3.5	2.0E-28	AL163248.2	NT	element MER6 repetitive element;
9868	22802	36256	3.5	2.0E-28	AL163248.2	NT	601442206F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846648 5'
10599	23521	37013	3.27	2.0E-28	AL163248.2	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
11806	24692	37014	4.13	2.0E-28	11425108	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
11844	24727		2.03	2.0E-28	AW880701.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
9144	22110	35536	10.17	1.0E-28	AW883880.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
10988	23906	37420	0.59	1.0E-28	X60658.1	NT	Homo sapiens chromosome 21 segment HS21C048
6734	19790	33070	3.26	9.0E-30	AA761215.1	EST_HUMAN	Homo sapiens splicing factor similar to dnaJ (SPF31), mRNA
12263	25087		2.14	9.0E-30	11422745	NT	QV0-O10032-080300-155-d01 OT0032 Homo sapiens cDNA
6452	19517		9.62	8.0E-30	F08688.1	EST_HUMAN	RC1-HN0003-220300-021-504 HN0003 Homo sapiens cDNA
8613	21581	34997	3.18	8.0E-30	AA383873.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
8031	21997	35416	3.9	8.0E-30	AI557072.1	EST_HUMAN	nt20c07.at NCL_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1288332 3' similar to contains MER4.b1
							MER4 repetitive element;
							Homo sapiens zinc/ferron regulated transporter-like (ZIRT1), mRNA
							HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
							EST197317 Thymus 1 Homo sapiens cDNA 5' and similar to EST containing O family repeat
							PT2.1_13 B11.r tumor2 Homo sapiens cDNA 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1518	14580		1.02	7.0E-30	BE081133.1	EST_HUMAN	PM4-BT0724-150400-004-dt11 BT0724 Homo sapiens cDNA
1571	14604		1.4	6.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
1788	14817	27802	1.8	6.0E-30	D25303.1	NT	Human mRNA for integrin alpha subunit, complete cds
3204	16259	29178	2.51	6.0E-30	BE008028.1	EST_HUMAN	QV0-BN0147-280400-214-f12 BN0147 Homo sapiens cDNA
4791	16259	29178	1.02	6.0E-30	BE008028.1	EST_HUMAN	QV0-BN0147-280400-214-f12 BN0147 Homo sapiens cDNA
10805	23825	37337	0.74	6.0E-30	AF17727.1	NT	Homo sapiens CTCL tumor antigen sc20-10 mRNA, partial cds
13054	14804		4.35	6.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
4041	17078	29879	32.98	5.0E-30	AI399892.1	EST_HUMAN	tg82g03.x1 NCI_OGAP_GLL1 Homo sapiens cDNA clone IMAGE:2116276 3' similar to contains Alu repetitive element
5310	25746		4.98	5.0E-30	U87831.1	NT	Human aconitase hydratase (ACO2) gene, exon 7
11233	24188		2.21	5.0E-30	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
11489	24432	37981	2.03	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C070
11489	24432	37982	2.03	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2153	15169	28185	1.78	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c08 DT0043 Homo sapiens cDNA
2153	15169	28188	1.79	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c08 DT0043 Homo sapiens cDNA
7035	18367	31254	0.55	4.0E-30	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
8256	22222	35652	2.5	4.0E-30	AW612488.1	EST_HUMAN	GM1-ST0181-091199-035-f08 ST0181 Homo sapiens cDNA
1154	14186		4.51	3.0E-30	AI338551.1	EST_HUMAN	qp83cd5.x1 Soares_total_fetus_Nb2HFB_9w Homo sapiens cDNA clone IMAGE:1838920 3' similar to contains MER29.b2 MER29 repetitive element ;
3770	16812	28721	1.03	3.0E-30	AF128883.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
7470	20436	33793	0.5	3.0E-30	T18882.1	EST_HUMAN	b12056a Testis 1 Homo sapiens cDNA clone b12056
8284	21253		0.52	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8831	21788		0.44	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10800	23721	37224	2.18	3.0E-30	BE350127.1	EST_HUMAN	h089g01.x1 NCI_OGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element ;
10832	23852	37968	0.52	3.0E-30	AB032869.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
10932	23852	37967	0.52	3.0E-30	AB032869.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11641	24482	38034	5.69	3.0E-30	P34056	SWISSPROT	TRANSCRIPTION FACTOR AP-2
676	17739	26668	1.57	2.0E-30	AW857315.1	EST_HUMAN	CMO-CT0307-310100-158-h03 CT0307 Homo sapiens cDNA
1088	14130		3.03	2.0E-30	F08688.1	EST_HUMAN	HS023F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
1475	14508	27482	5.38	2.0E-30	BE175877.1	EST_HUMAN	RC6-HT0582-110400-013-h08 HT0582 Homo sapiens cDNA
2727	15721	28738	11.19	2.0E-30	BE1765232.1	EST_HUMAN	IL2-NT0101-280700-119-E04 NT0101 Homo sapiens cDNA
2830	15888	28909	6.11	2.0E-30	AF114158.1	NT	Homo sapiens Y-linked zinc finger protein (ZFY) gene, complete cds

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3803	16843	29751	2.1	2.0E-30	AW206581.1	EST_HUMAN	UI-H-BH1-efo-o-12-Q-JLx1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722658 3'
4812	17828	30728	1.76	2.0E-30	BE288945.1	EST_HUMAN	601110880F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028438 5'
4812	17828	30727	1.76	2.0E-30	BE288945.1	EST_HUMAN	601110880F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028438 5'
6822	18972	33269	0.71	2.0E-30	BF306337.1	EST_HUMAN	601883208F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138993 5'
8820	21787	35211	0.68	2.0E-30	AA019103.1	EST_HUMAN	zef59c10.r1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:363186 5'
8882	21849	35270	7.02	2.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (TF-ujihara) Homo sapiens cDNA clone GEN:570C01 5'
8882	21948	35371	3.98	2.0E-30	BE670617.1	EST_HUMAN	7637c12x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW-DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR ;
8882	21948	35372	3.98	2.0E-30	BE670617.1	EST_HUMAN	7637c12x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW-DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR ;
10356	23280	36758	3.98	2.0E-30	AW971588.1	EST_HUMAN	EST333657 IMAGE resequences, MAGL Homo sapiens cDNA hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
10442	23364	36854	8.55	2.0E-30	AW470791.1	EST_HUMAN	C18939 Human placenta cDNA (TF-ujihara) Homo sapiens cDNA clone GEN:570C01 5'
286	13381	26309	18.55	1.0E-30	C18939.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
538	13610	26529	7.04	1.0E-30	AW498897.1	EST_HUMAN	C18939 Human placenta cDNA (TF-ujihara) Homo sapiens cDNA clone GEN:570C01 5'
717	13779	26713	1.23	1.0E-30	AL163203.2	NT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
2222	15236	28260	3.82	1.0E-30	AA694377.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
2469	15473	28496	2.39	1.0E-30	BF347728.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
3067	16124	29037	1.12	1.0E-30	AA316045.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
7895	20934	34328	2.08	1.0E-30	BF183230.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
12882	25841		11.93	1.0E-30	H55593.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
8667	21635	35056	0.92	9.0E-31	R18214.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
8667	21635	35057	0.92	9.0E-31	R18214.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
8871	21937		1.79	9.0E-31	Z38293.1	EST_HUMAN	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
8873	21939	35364	0.49	9.0E-31	AF078778.1	NT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
1078	14123	27076	1.82	8.0E-31	8923389	NT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
2423	15430		5.98	8.0E-31	AL163203.2	NT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
4955	17970	30860	1.12	8.0E-31	P23275	SWISSPROT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;
4955	17970	30861	1.12	8.0E-31	P23275	SWISSPROT	hs33d06.x1 NCL_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element ;

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
712	13774		1.89	7.0E-31	AA372837.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' and
2676	15672	28691	2.38	7.0E-31	BE328517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
2676	15672	28692	2.38	7.0E-31	BE328517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
8744	21712	35133	0.99	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
8744	21712	35134	0.99	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
9621	22565		0.92	7.0E-31	BE408911.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3683310 5'
12711	25368	31771	5.66	7.0E-31	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3691	16734		3.06	6.0E-31	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8493	21461		7.57	6.0E-31	AF055068.1	NT	Homo sapiens MHG class 1 region
8674	21642	35067	0.7	6.0E-31	BE350127.1	EST_HUMAN	hw09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.B3
11090	24050	37573	1.86	6.0E-31	AU119105.1	EST_HUMAN	MER29 repetitive element ;
12325	25127	31848	2.27	6.0E-31	AW372868.1	EST_HUMAN	AU119105 HEMBA1 Homo sapiens cDNA clone HEMBA1005050 5'
12456	25764		2.08	6.0E-31	BE894488.1	EST_HUMAN	RC5-BT0377-091299-031-D12 BT0377 Homo sapiens cDNA
194	13295	26222	2.83	5.0E-31	M60694.1	NT	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3818524 5'
194	13295	26223	2.83	5.0E-31	M60694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
8788	21755		1.46	5.0E-31	BF058540.1	EST_HUMAN	Homo sapiens type I DNA topoisomerase gene, exon 8
598	13685		3.45	4.0E-31	AJ271735.1	NT	7106604.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3443478 3' similar to TR:Q13537 Q13537
							SIMILAR TO POGO ELEMENT. ; contains 1.1.11 L1 repetitive element ;
							Homo sapiens Xq pseudautosomal region; segment 1/2
1615	14647	27622	1.01	4.0E-31	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE (PROTEIN-UDP
1834	14861		2.09	4.0E-31	AL163280.2	NT	ACETYL GALACTOSAMINYL TRANSFERASE (UDP-GALNAc POLYPEPTIDE, N-
2800	16782		1.98	4.0E-31	6730038	NT	ACETYL GALACTOSAMINYL TRANSFERASE (GALNAc-T1)
10900	23820	37329	0.43	4.0E-31	AF084464.1	NT	Homo sapiens chromosome 21 segment HS21C080
							Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
2603	15603	26625	0.98	3.0E-31	6005871	NT	Rattus norvegicus GTP-binding protein REM2 (Rem2) mRNA, complete cds
7562	20525	33883	6.73	3.0E-31	4826853	NT	Homo sapiens SEC83, endoplasmic reticulum translocon component (S. cerevisiae) like (SEC83L), mRNA
7736	20691	34055	1.28	3.0E-31	11420329	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (18kD, ASH1) (NDUFB8) mRNA
8501	21469		2.35	3.0E-31	AL163206.2	NT	Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA
9939	22866	36328	4.66	3.0E-31	D14523.1	NT	Homo sapiens chromosome 21 segment HS21C008
10861	23881	37394	0.52	3.0E-31	AA421242.1	EST_HUMAN	Horse mRNA for ferritin L-chain, complete cds
							z006004.f1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:731047 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10985	23861	37486	3.17	3.0E-31	P11174	SWISSPROT	40S RIBOSOMAL PROTEIN S15 (RIG PROTEIN)
11487	24430		6.94	3.0E-31	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862086 5'
1932	14958	27953	1.33	2.0E-31	AW838171.1	EST_HUMAN	QV2-LT0051-260300-111-403 LT0051 Homo sapiens cDNA
2224	15238	28262	0.98	2.0E-31	AJ393388.1	EST_HUMAN	tp44g05.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2111672 3'
2347	15368	28379	2.53	2.0E-31	AL119245.1	EST_HUMAN	DKFZp761G1613_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G1513 5'
2447	15452	28473	5.67	2.0E-31	AA458824.1	EST_HUMAN	ea88f11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THIR12 THR repetitive element ;
5347	18452	31323	0.72	2.0E-31	AW444498.1	EST_HUMAN	UIH-B18-alkb-f-09-D-U1.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733833 3'
5788	18890	32072	2.86	2.0E-31	BE350127.1	EST_HUMAN	h108g01.x1 NCL_CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER28.b3 MER29 repetitive element ;
9431	22395		2.71	2.0E-31	AA877764.1	EST_HUMAN	h10804.s1 NCL_CGAP_Cot10 Homo sapiens cDNA clone IMAGE:1161055 3' similar to TRC-Q13537 Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
9562	22524	35973	4.13	2.0E-31	7661535	NT	Homo sapiens B9 protein (B9), mRNA
10266	23191	36677	1.13	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CUAALB07 5'
10268	23191	36677	1.13	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CUAALB07 5'
10435	23357	36844	2.57	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
10435	23357	36845	2.57	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
12427	25195		1.91	2.0E-31	AF148512.1	NT	Homo sapiens hexokinase II gene, promoter region
12568	25987		3.94	2.0E-31	AI114527.1	EST_HUMAN	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
17	13137	26036	11.03	1.0E-31	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
1671	14703	27878	3.34	1.0E-31	O86371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1671	14703	27878	3.34	1.0E-31	O86371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1671	14703	27880	3.34	1.0E-31	O86371	SWISSPROT	OLFACTORY RECEPTOR 2C1
4668	17887	30571	1.35	1.0E-31	AL134376.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
4668	17887	30572	1.35	1.0E-31	AL134376.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
5365	18470	31341	3.75	1.0E-31	AW391679.1	EST_HUMAN	MR3-ST0220-151289-028-a08_1 ST0220 Homo sapiens cDNA
6268	18329	32559	2.31	1.0E-31	AF046727.1	NT	Homo sapiens minisatellite ccb1 repeat region
7506	20471	33631	1.08	1.0E-31	AF126145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
8132	21069	34468	0.76	1.0E-31	BE972818.1	EST_HUMAN	601652052F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935293 5'
10596	23518	37009	0.68	1.0E-31	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11261	24213	37737	4.66	1.0E-31	A1086434.1	EST_HUMAN	q121103.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1760709 3' similar to TR:Q16595 Q16595 FRATAXIN;
12103	24974	38571	1.5	1.0E-31	U69091.1	NT	Human germine T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV26S1P, TCRBV16S1P, TCRBV15S1, TCRBV11S1A1T, HVB nrlc, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY6, TRY8, TRY7, TRY8, TCRBD1, TCRBJ1S1, TCRBJ1S2,>
6795	19849	33134	2.13	9.0E-32	AV723978.1	EST_HUMAN	AV723978 HTB Homo sapiens cDNA clone HTBAAG01 5'
7598	20559	33919	0.63	9.0E-32	L31770.1	NT	Bos taurus vacuolar H+-ATPase subunit mRNA, complete cds
7848	20795		0.85	9.0E-32	11430822	NT	Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA
2090	15107	28126	3.05	8.0E-32	A1056770.1	EST_HUMAN	alpha15a09.x1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1676394 3'
5659	18956	31601	0.89	8.0E-32	AW697214.1	EST_HUMAN	RC2-BN0048-200300-015-e04 BN0048 Homo sapiens cDNA NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 (PORE MEMBRANE PROTEIN OF 121 KD) (P145)
4898	17913	30803	1.16	7.0E-32	P62591	SWISSPROT	Human chromosome 22 immunoglobulin V(K) gene, part with 5' breakpoint between orphon and neighbouring non-amplified region
12405	25178		7.66	7.0E-32	X17283.1	NT	Im34a10.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2169994 3' similar to contains MER29.13 MER29 repetitive element;
2742	15736	28752	1.2	6.0E-32	A1478104.1	EST_HUMAN	801511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
7591	20552		1.29	6.0E-32	BE88016.1	EST_HUMAN	Homo sapiens PRO1181 mRNA, complete cds
1035	14081	27032	17.73	5.0E-32	AF116927.1	NT	Homo sapiens chromosome 21 segment HS21C048
931	13984		1.85	4.0E-32	AL163246.2	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
7861	20805	34181	3.03	4.0E-32	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
7861	20805	34182	3.03	4.0E-32	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
8702	21670		1	4.0E-32	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-H08 BT0311 Homo sapiens cDNA
466	13529	29459	3.32	3.0E-32	Y17293.1	NT	Homo sapiens FLJ-1 gene, partial
1448	14481	27458	9.76	3.0E-32	AV731500.1	EST_HUMAN	AV731500 HTF Homo sapiens cDNA clone HTFAK007 5'
9749	22690	36147	19.67	3.0E-32	AV758634.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBH12 5'
9749	22690	36148	19.67	3.0E-32	AV758634.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBH12 5'
11270	24222	37747	2.81	3.0E-32	AA777621.1	EST_HUMAN	z16a07.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:449500 3' similar to contains THR3 THR repetitive element;
11550	24491		1.46	3.0E-32	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3682088 5'
12430	25197		5.4	3.0E-32	BE278086.1	EST_HUMAN	601166265F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
12786	18336	31283	3.46	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12786	18336	31284	3.48	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) homology); translocated to, 4 (MLLT4) mRNA
12837	25517		4.33	3.0E-32	BE278086.1	EST_HUMAN	601156285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
4918	17935	30827	0.97	2.0E-32	BE286813.1	EST_HUMAN	601173631F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3629159 5'
6381	19449	32880	0.87	2.0E-32	M35418.1	NT	Human cell 12-lipoxygenase mRNA, complete cds
6624	19882	32959	6.86	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin
6624	19882	32960	6.86	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin
8621	21589	35008	2.19	2.0E-32	AA114294.1	EST_HUMAN	z66c08.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
8621	21589	35007	2.19	2.0E-32	AA114294.1	EST_HUMAN	z66c08.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
13049	25589	31683	4.17	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBIA08 5'
13049	25589	31684	4.17	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBIA08 5'
3110	16167		1.07	1.0E-32	BE743289.1	EST_HUMAN	601573207F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834433 5'
7256	19891	33289	6.73	1.0E-32	11439789	NT	Homo sapiens chromosome 11 open reading frame 9 (G1ORF9), mRNA
8943	21809	35334	6.78	1.0E-32	AA720574.1	EST_HUMAN	HW21602.s1 NCI_CGAP_G080 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.3
3493	18540		5.7	9.0E-33	BE327112.1	EST_HUMAN	THR repetitive element ; hw07c05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182216 3' similar to TR:088539 088539 WW DOMAIN BINDING PROTEIN 11. ;
6560	19620		3.43	9.0E-33	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
9140	22106	35532	1.82	9.0E-33	BF347228.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
11150	24110		4.08	9.0E-33	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
63	13162	26098	2.4	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
63	13182	26099	2.4	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
2169	15185	28206	2.43	7.0E-33	AI590115.1	EST_HUMAN	for2b09.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFFLH OFFR repetitive element ;
2867	15654		7.82	7.0E-33	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE06 5'
2841	14737	27719	1.62	7.0E-33	AV730015.1	EST_HUMAN	AV730015 HTF Homo sapiens cDNA clone HTFAVE08 5'
3256	16310		16.32	7.0E-33	AW971907.1	EST_HUMAN	EST333398 MAGI resequences, MAGL Homo sapiens cDNA
9298	22264		1.07	7.0E-33	X54890.1	NT	Human hLRP mRNA for leukocyte common antigen-related peptide (protein-tyrosine phosphatase) (EC 3.1.3.48)
11178	24134	37664	2.89	7.0E-33	BF347229.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
11578	24516	38071	2.65	7.0E-33	AW971588.1	EST_HUMAN	EST333657 MAGI resequences, MAGL Homo sapiens cDNA
12409	26182	31819	3.85	7.0E-33	AA601416.1	EST_HUMAN	no16h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1.L1 L1 repetitive element ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3749	16791		0.69	6.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
6185	18260	32494	1.09	6.0E-33	F30681.1	EST_HUMAN	HSPD21201 HM3 Homo sapiens cDNA clone s4000107H06
6185	18260	32495	1.09	6.0E-33	F30681.1	EST_HUMAN	HSPD21201 HM3 Homo sapiens cDNA clone s4000107H06
8825	21891	35319	7.52	6.0E-33	J04038.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
9050	22018	35440	3.18	6.0E-33	11429108	NT	Homo sapiens similar to RAD23 (S. cerevisiae) homolog B (H. sapiens) (LOC63277), mRNA
10371	23284	36769	1.73	6.0E-33	8755609	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
10371	23294	36770	1.73	6.0E-33	8755609	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
1792	14821		1.63	6.0E-33	BF373515.1	EST_HUMAN	QV1-FT0168-100700-271-a02 FT0168 Homo sapiens cDNA
1898	14823		1.27	5.0E-33	11141884	NT	Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC5A7), mRNA
1914	14838	27933	1.31	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
1914	14838	27934	1.31	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
2280	15293		1.49	5.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4087	17121	30015	1.28	5.0E-33	AB014589.1	NT	Homo sapiens mRNA for KIAA0689 protein, partial cds
6823	19877	33166	51.92	5.0E-33	AA189080.1	EST_HUMAN	z44508.s1 Stragene hNT neuron (#837283) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element;
10610	23532	37027	0.85	5.0E-33	AW264678.1	EST_HUMAN	xp33f11.x1 NCI CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
10610	23532	37028	0.85	5.0E-33	AW264679.1	EST_HUMAN	xp33f11.x1 NCI CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
1130	14173		0.87	4.0E-33	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2135	15152	28167	1.53	4.0E-33	4758987	NT	Homo sapiens RAB1, member RAS oncogene family (RAB1) mRNA
2428	15435		2.92	4.0E-33	AA028821.1	EST_HUMAN	ab51b1.1 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844317 5' similar to contains Alu repetitive element; contains MER28 b2 MER28 repetitive element;
2562	15554	28574	2.35	4.0E-33	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4509	17634	30418	1.65	4.0E-33	AW293349.1	EST_HUMAN	UI-H-B12-ah1-c-03-Q-UI.s1 NCI CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727149 3'
5477	18578	31487	21.95	4.0E-33	AA053053.1	EST_HUMAN	x171a08.r1 Stragene colon (#837204) Homo sapiens cDNA clone IMAGE:510038 5' similar to gb:U12671_mn1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
6532	19595	32857	2.14	4.0E-33	8393984	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
6532	19595	32858	2.14	4.0E-33	8393984	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
1091	14135		6.18	3.0E-33	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
1092	14135		4.81	3.0E-33	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
2456	15894		0.91	3.0E-33	AV647851.1	EST_HUMAN	AV647851 GLC Homo sapiens cDNA clone GLC9CF09 3'
10806	23727	37228	1.02	3.0E-33	AA861510.1	EST_HUMAN	ak32b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1407847 3' similar to TR-Q13579 Q13579 MARINER TRANSPOSASE.;

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18	13138		0.03	2.0E-33	AI160189.1	EST_HUMAN	qb67g03.x1 Soares_fetal_heart_NbH-H19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFFL1 OFR repetitive element;
105	13138		2.03	2.0E-33	AI160189.1	EST_HUMAN	qb67g03.x1 Soares_fetal_heart_NbH-H19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFFL1 OFR repetitive element;
4449	17475		4.22	2.0E-33	BE159039.1	EST_HUMAN	MF80-HT0405-160300-202-008 HT0405 Homo sapiens cDNA
5021	18035	30920	9.82	2.0E-33	AA626883.1	EST_HUMAN	ab51g11.r1 Stragene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:844388 5' similar to gb:200734_cds1 TUBULIN BETA-5 CHAIN (HUMAN);
5129	18138	31015	2.58	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
5129	18138	31016	2.58	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
6563	18623	32888	1	2.0E-33	AI277492.1	EST_HUMAN	qb6d01.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1880161 3'
9456	22420		2.29	2.0E-33	AI052256.1	EST_HUMAN	oz21603.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675973 3' similar to gb:M28636 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN);
10978	23899	37411	0.9	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10979	23899	37412	0.9	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
9	13129		2.05	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5669	18764	31834	0.7	1.0E-33	AF169420.1	NT	Homo sapiens F-box protein FBL4 (FBL4) mRNA, complete cds
7637	20597	33961	1.18	1.0E-33	MI13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
10381	26010		0.73	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
11377	24324	37853	1.72	1.0E-33	AV744220.1	EST_HUMAN	AV744220 CB Homo sapiens cDNA clone GBOAAA11 5'
11650	24587	38157	1.79	1.0E-33	AW096818.1	EST_HUMAN	QV3-BN0047-230200-102-503 BN0047 Homo sapiens cDNA
11973	24851	38448	2.59	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12685	26352		1.98	1.0E-33	AI927191.1	EST_HUMAN	w088c08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462410 3'
12852	13129		3.4	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4844	17865		1.17	9.0E-34	BE155575.1	EST_HUMAN	PM4-HT0352-181189-001-D02 HT0352 Homo sapiens cDNA
13069	25603		3.44	9.0E-34	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2181	15186	28216	0.93	8.0E-34	8922751	NT	Homo sapiens hypothetical protein FLJ10900 (FLJ10900), mRNA
6077	21014	34414	0.49	8.0E-34	BE069882.1	EST_HUMAN	MF4-BT0399-200100-001-h03 BT0399 Homo sapiens cDNA
1439	14472	27449	2.93	7.0E-34	T70845.1	EST_HUMAN	y415605.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
10359	14472	27449	0.6	7.0E-34	T70845.1	EST_HUMAN	y415605.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
12479	26227		1.69	7.0E-34	H12868.1	EST_HUMAN	y14c10.r1 Soares_placenta_Nb2-IP Homo sapiens cDNA clone IMAGE:148722 5'
471	13543	26471	2.11	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
471	13543	26472	2.11	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12287	25103	31836	1.86	6.0E-34	U03686.1	NT	Mus musculus DAB2J hair-specific (hac1-1) gene
1897	14922		2.36	5.0E-34	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51728), mRNA
5101	18111	30983	4.68	5.0E-34	U30883.1	NT	Human splicing factor SRp55-1 (SRp-55) mRNA, complete cds
8218	22184	35617	1.17	5.0E-34	AF078179.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
11015	23980	37508	2.03	5.0E-34	AB037858.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
11583	24521		1.49	5.0E-34	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2014	15035	28046	1.71	4.0E-34	AB04687.1	EST_HUMAN	h94c06.x1 NC1 CGAP P728 Homo sapiens cDNA clone IMAGE:2249184 3'
5223	18231	31108	0.64	4.0E-34	AW886252.1	EST_HUMAN	RC5-OT0078-280300-022-D02 OT0078 Homo sapiens cDNA
9393	22358	35788	1.07	4.0E-34	BF209778.1	EST_HUMAN	601874950F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4102213 5'
6359	19428	32671	0.74	3.0E-34	M37277.1	NT	Human Ig gamma1 H-chain D-region genes, partial cds
11488	24429		3.18	3.0E-34	BF036327.1	EST_HUMAN	601498531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
9303	22268	35688	1.93	2.0E-34	AI678101.1	EST_HUMAN	wk35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER28.12 MER29 repetitive element;
9303	22268	35688	1.93	2.0E-34	AI678101.1	EST_HUMAN	wk35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER28.12 MER29 repetitive element;
11496	24439	37987	1.57	2.0E-34	P51805	SWISSPROT	PLEXIN 4 PRECURSOR (TRANSMEMBRANE PROTEIN SEX)
11496	24439	37988	1.57	2.0E-34	P51805	SWISSPROT	PLEXIN 4 PRECURSOR (TRANSMEMBRANE PROTEIN SEX)
1505	14538	27510	8.53	1.0E-34	P12236	SWISSPROT	ADP-ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3687	16730	28641	1.35	1.0E-34	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4098	17132	30025	0.81	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4098	17132	30026	0.81	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4508	17631		6.11	1.0E-34	BE071414.1	EST_HUMAN	RC2-BT0508-240400-016-h08 BT0508 Homo sapiens cDNA
6261	18334	32565	1.98	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886989 5'
6261	18334	32566	1.98	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886989 5'
9881	22634	38090	0.46	1.0E-34	P23266	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F6
10055	22982	38450	14.47	1.0E-34	AL036636.1	EST_HUMAN	DKFZp564A1563 J1 584 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564A1563 5'
11518	24457	38007	1.71	1.0E-34	BE781790.1	EST_HUMAN	601470682F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873478 5'
11516	24457	38008	1.71	1.0E-34	BE781790.1	EST_HUMAN	601470592F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873478 5'
11530	24471	38022	3.22	1.0E-34	114395598	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
12654	25921		1.4	1.0E-34	AA807087.1	EST_HUMAN	cc31c11.s1 NC1 CGAP GC81 Homo sapiens cDNA clone IMAGE:1351316 3' similar to gb:U08203
12674	25507		4.01	1.0E-34	AL163210.2	NT	TYROSINE-PROTEIN KINASE RECEPTOR FLT4 PRECURSOR (HUMAN); Homo sapiens chromosome 21 segment HS21C010

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3659	16702	28617	1.25	9.0E-35	AW583302.1	EST_HUMAN	hh77608.y1 NCI_CGAP_GLI1 Homo sapiens cDNA clone IMAGE:2068787 5'
227	13328		13.21	8.0E-35	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
1751	14780	27765	4.47	8.0E-35	BF589937.1	EST_HUMAN	nas33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
1751	14780	27768	4.47	8.0E-35	BF589937.1	EST_HUMAN	O75912 DIACYLGLYCEROL KINASE IOTA. ;
4802	17819	30811	2.91	8.0E-35	BF183195.1	EST_HUMAN	nas33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
11049	24012	37537	1.34	8.0E-35	BE378480.1	EST_HUMAN	O75912 DIACYLGLYCEROL KINASE IOTA. ;
12402	25175		5.41	8.0E-35	BF589282.1	EST_HUMAN	601809588F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040324 5'
6831	18688	32968	1.85	7.0E-35	11425417	NT	601238468F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608513 5'
1411	14444	27416	0.93	6.0E-35	AA757115.1	EST_HUMAN	602184624T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300860 3'
1885	15006	28009	2.85	6.0E-35	6005976	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
4083	17117	30012	0.76	6.0E-35	AW297181.1	EST_HUMAN	ah53h03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1308397 3'
8220	21198	34606	3.66	6.0E-35	6005921	NT	Homo sapiens zinc finger protein 208 (ZNF208), mRNA
9058	22024	35447	0.51	6.0E-35	X94232.1	NT	UIH-BW0-gid-09-Q-Ule1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2791433 3'
10025	22952	36420	0.68	6.0E-35	AB002384.1	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
10263	23188	36672	3.04	6.0E-35	AB037786.1	NT	H. sapiens mRNA for novel T-cell activation protein
1722	14752	27737	61.6	5.0E-35	X63592.1	NT	H. sapiens mRNA for novel T-cell activation protein
2795	15787	28805	0.9	5.0E-35	AB007868.2	NT	Human mRNA for KIAA0368 gene, partial cds
3021	16079	29000	1.47	5.0E-35	6012639	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
							H. sapiens immunoglobulin kappa light chain variable region L14
							Homo sapiens mRNA for KIAA0406 protein, partial cds
							Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
							Homo sapiens cdk2 kinase (CLK2), profilin, cdc1, glucocorticoidase (GBA), and metadase genes, complete cds; metadase pseudogene and glucocorticoidase pseudogene; and thrombospondin3 (THBS3) gene, partial cds
4438	17484	30354	2.05	5.0E-35	AF023268.1	NT	TCBAP-1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP3842
4742	17762	30856	0.99	5.0E-35	BE246065.1	EST_HUMAN	601431894F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917228 5'
8525	21493		4.74	5.0E-35	BE590982.1	EST_HUMAN	qg38-c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to
							SW:Y249_HUMAN_Q92539 HYPOTHETICAL PROTEIN KIAA0249. ;
8552	21520	34939	2.2	5.0E-35	AI208765.1	EST_HUMAN	qg38-c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to
8562	21520	34940	2.2	5.0E-35	AI208765.1	EST_HUMAN	SW:Y249_HUMAN_Q92539 HYPOTHETICAL PROTEIN KIAA0249. ;
11512	24453		2.39	5.0E-35	AA001783.1	EST_HUMAN	zh84f12.r1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:428015 5'
1428	14463	27440	19.86	4.0E-35	BE257907.1	EST_HUMAN	601109719F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350406 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1835	14862	27859	7.51	4.0E-35	H91193.1	EST_HUMAN	y98a07.11 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:241238 5' similar to contains PTR5 repetitive element;
4844	17861		0.63	4.0E-35	AF003528.1	NT	Homo sapiens X-linked arhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5145	18154		0.93	4.0E-35	BE409102.1	EST_HUMAN	601300705F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635401 5'
7416	20383		1.81	4.0E-35	BE350127.1	EST_HUMAN	h109g01.x1 NCI_CGAP_K1413 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
8863	21830	35253	8.37	4.0E-35	AL046586.1	EST_HUMAN	DKFZp434L148.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L148 5'
1582	14615	27588	21.76	3.0E-35	BE268182.1	EST_HUMAN	601125260F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345063 5'
2338	15349		3.36	3.0E-35	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
5413	18516	31393	27.9	3.0E-35	BF433100.1	EST_HUMAN	7n25509.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR-Q8QZH7
5413	18516	31394	27.9	3.0E-35	BF433100.1	EST_HUMAN	Q8QZH7 F-BOX PROTEIN FBL2 ;
9844	22780		1.71	3.0E-35	AF223391.1	NT	7n25509.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR-Q8QZH7
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10535	23457	36964	0.83	3.0E-35	AW003063.1	EST_HUMAN	w03a05.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2480432 3' similar to SW:POL1_HUMAN P10286 RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ;
108	15832	26146	0.83	2.0E-35	N88965.1	EST_HUMAN	K6832F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6832 5' similar to
1192	14232	27188	1.39	2.0E-35	T11909.1	EST_HUMAN	REPTITIVE ELEMENT
2227	15241	28266	5.04	2.0E-35	AB018413.1	NT	A971F Heart Homo sapiens cDNA clone A971
							Homo sapiens mRNA for Gab2, complete cds
2893	15889	28706	1	2.0E-35	AW685005.1	EST_HUMAN	h18a12.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979166 3' similar to
3323	16374	29284	0.83	2.0E-35	6912459	NT	SW:TR12_HUMAN Q14968 THYROID RECEPTOR INTERACTING PROTEIN 12 ;
3323	16374	29285	0.83	2.0E-35	6912459	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
3570	16615		1.06	2.0E-35	AB020702.1	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
							Homo sapiens mRNA for KIAA0895 protein, partial cds
3930	16970	29883	1.42	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HQSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3930	16970	29884	1.42	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HQSC project=TCBA Homo sapiens cDNA clone TCBAP4328
4697	17718		2.65	2.0E-35	H49239.1	EST_HUMAN	y418a12.11 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:274070 5'
5662	18758	31826	1.8	2.0E-35	BF332417.1	EST_HUMAN	QV0-BT0701-210400-168-504 BT0701 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7311	20282	33622	0.65	2.0E-35	BE832636.1	EST_HUMAN	CM2-MT0125-280700-297-G02 MT0125 Homo sapiens cDNA
7311	20282	33623	0.65	2.0E-35	BE832636.1	EST_HUMAN	CM2-MT0125-280700-297-G02 MT0125 Homo sapiens cDNA
11148	24108	37634	11.23	2.0E-35	X39417.1	NT	H. sapiens PROS-27 mRNA
12158	16374	28294	2.39	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
12158	16374	28295	2.39	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
12340	25138	31851	1.47	2.0E-35	BE904978.1	EST_HUMAN	601496774F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3898699 5'
12340	25138	31852	1.47	2.0E-35	BE904978.1	EST_HUMAN	601496774F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3898699 5'
12854	25482		7.88	2.0E-35	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
12873	15832	28148	1.72	2.0E-35	N88985.1	EST_HUMAN	K8932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K8932 5' similar to REPETITIVE ELEMENT
48	13188	26073	5.26	1.0E-35	AA631949.1	EST_HUMAN	frnc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
48	13188	26074	5.26	1.0E-35	AA631949.1	EST_HUMAN	frnc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
753	13814	26756	95.25	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131039-008-d12 ST0162 Homo sapiens cDNA
753	13814	26757	95.26	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131039-008-d12 ST0162 Homo sapiens cDNA
910	13985		0.99	1.0E-35	T87947.1	EST_HUMAN	y893a01.1 Scores fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:115752 5' similar to SP-A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
2549	15550	28571	3.02	1.0E-35	7705934	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
2778	15770	28790	1.85	1.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146268 3' similar to contains MER28.b3
2778	15770	28791	1.85	1.0E-35	BE350127.1	EST_HUMAN	MER28 repetitive element;
3177	16232	29148	3.44	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCGER08 3'
3177	16232	29149	3.44	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCGER08 3'
4452	17478	30365	4.04	1.0E-35	7856905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
4452	17478	30366	4.04	1.0E-35	7856905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
5698	18884	31653	1.54	1.0E-35	11528236	NT	Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA
7189	18420	31221	0.59	1.0E-35	AW808665.1	EST_HUMAN	MR1-ST0111-111189-011-d07 ST0111 Homo sapiens cDNA
7189	18420	31222	0.59	1.0E-35	AW808665.1	EST_HUMAN	MR1-ST0111-111189-011-d07 ST0111 Homo sapiens cDNA
7725	20681	34045	0.83	1.0E-35	AB033105.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
7803	20848	34231	0.94	1.0E-35	11418002	NT	Homo sapiens KIAA0845 gene product (KIAA0845), mRNA
8900	25689	36312	3.17	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACES3 Homo sapiens cDNA clone PLACE300382 3'
8900	25689	36313	3.17	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACES3 Homo sapiens cDNA clone PLACE300382 3'
10842	23862	37977	0.63	1.0E-35	BF589594.1	EST_HUMAN	nas08406.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR-031941 Q31341 BETA-GALACTOSIDASE ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
10942	23892	37378	0.63	1.0E-35	BF689594.1	EST_HUMAN	ncs06008.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR-O31341
12052	24925	38522	1.72	1.0E-35	AB028980.1	NT	O31341 BETA-GALACTOSIDASE;
12052	24925	38523	1.72	1.0E-35	AB028980.1	NT	Homo sapiens mRNA for KIAA1057 protein, partial cds
12057	24930		1.59	1.0E-35	AI525119.1	EST_HUMAN	Homo sapiens mRNA for KIAA1057 protein, partial cds
12188	25937		1.71	1.0E-35	11418274	NT	protrime-7.D01.7 b1 tumor Homo sapiens cDNA 5'
12320	15550	28571	1.42	1.0E-35	7705904	NT	Homo sapiens fibulin 1 (FBLN1), mRNA
12404	25177		1.77	1.0E-35	11418110	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
12747	25398		1.97	1.0E-35	BE782832.1	EST_HUMAN	Homo sapiens casein kinase 1, epsilon (CSNK1E), mRNA
4011	17050	28958	2.35	9.0E-36	AW821707.1	EST_HUMAN	601684833P1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3638865 5'
6123	18201	32425	0.75	8.0E-36	X78478.1	NT	RC3-ST0315-180200-013-412 ST0315 Homo sapiens cDNA
9585	22547	35998	0.61	8.0E-36	AA348480.1	EST_HUMAN	B.bowie BBSs mRNA for schardin
10516	23438		0.46	8.0E-36	7706259	NT	EST54698 Hippocampus II Homo sapiens cDNA 5' and similar to endogenous retrovirus 9, 5' LTR
2942	16000	28623	1.88	7.0E-36	AW857578.1	EST_HUMAN	Homo sapiens CGI-09 protein (LOC51605), mRNA
3135	16182		4.05	7.0E-36	4557498	NT	GM1-CT0315-091298-063-d07 CT0315 Homo sapiens cDNA
7916	20859	34247	6.21	7.0E-36	U06672.1	NT	Homo sapiens C-terminal binding protein 2 (CTBP2) mRNA
7916	20859	34248	6.21	7.0E-36	U06672.1	NT	Human carcinoma embryonic antigen gene family member 12 (CGM12) gene, exons L and LN
12558	25278	31778	2.01	7.0E-36	AF052051.1	NT	Human carcinoma embryonic antigen gene family member 12 (CGM12) gene, exons L and LN
2021	15042	28053	4.16	6.0E-36	7706822	NT	Homo sapiens glutathione transferase A4 gene, exon 1
2427	15434		5.3	6.0E-36	AB035346.1	NT	Homo sapiens ninjurin 2 (NINJ2), mRNA
3653	16698	29611	1.88	6.0E-36	BF15101.1	EST_HUMAN	Homo sapiens TCL6 gene, exon 12
5404	18507	31384	5.06	6.0E-36	AI435169.1	EST_HUMAN	UI-H-BW1-ant-o-12-Q-UJ.a1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083542 3'
7316	20287	33629	3.48	6.0E-36	AW780143.1	EST_HUMAN	fb83506.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126185 3' similar to
8999	21865	35390	2.51	6.0E-36	AF208181.1	NT	gb-M11949 PANCREATIC SECRETORY TRYPSIN INHIBITOR PRECURSOR (HUMAN);
10585	23507		0.6	6.0E-36	C16827.1	EST_HUMAN	h006h02.x1 NCL_CGAP_C014 Homo sapiens cDNA clone IMAGE:3038627 3' similar to SW:IMA2_HUMAN
11874	24756	38339	3.51	6.0E-36	AI380499.1	EST_HUMAN	P52292 IMPORTIN ALPHA-2 SUBUNIT;
12983	25804	31528	1.9	6.0E-36	BE737154.1	EST_HUMAN	Homo sapiens synchthon precursor, mRNA, complete cds
138	13243	26173	12.86	5.0E-36	AJ271735.1	NT	C16827 Clontech human acta polyA+ mRNA (#5572) Homo sapiens cDNA clone GEN-635C11 5'
2761	15763	28773	12.8	5.0E-36	BE388438.1	EST_HUMAN	fb85-08.x1 NCL_CGAP_CL11 Homo sapiens cDNA clone IMAGE:2107024 3' similar to contains MER9 b2
3626	16689	29581	1.32	5.0E-36	AL163209.2	NT	MER9 repetitive element;
							601305084F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639762 5'
							Homo sapiens Xq pseudautosomal region; segment 1/2
							601285567F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607289 5'
							Homo sapiens chromosome 21 segment HS21G009

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4827	17844	30743	1.21	5.0E-36	5729728	NT	Homo sapiens API6-like 1 (API6L1), mRNA
4827	17844	30744	1.21	5.0E-36	5729728	NT	Homo sapiens API6-like 1 (API6L1), mRNA
8070	21007	34405	0.77	5.0E-36	11078227	NT	Homo sapiens N-ethylmaleimide-sensitive factor (NSF), mRNA
12180	13243	26173	2.97	5.0E-36	A271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12455	25214	31832	3.03	5.0E-36	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1228	14266	27223	1.24	4.0E-36	BE010038.1	EST_HUMAN	PM3-BN0178-100400-001-g04 BN0178 Homo sapiens cDNA
1436	14469	27447	0.89	4.0E-36	P10266	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
1652	14684	27658	1.63	4.0E-36	BE382574.1	EST_HUMAN	601288574F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628386 5'
2231	15245		1.64	4.0E-36	AW247772.1	EST_HUMAN	2820020 Eprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820020 5'
3365	16415	28340	0.65	4.0E-36	BE389289.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
3365	16416	28341	0.65	4.0E-36	BE389289.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
4766	17804	30698	0.71	4.0E-36	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
5804	18895		0.96	4.0E-36	R84023.1	EST_HUMAN	yf18905.r1 Soares placenta Nb2H-IP Homo sapiens cDNA clone IMAGE:139713 5'
6173	19248	32481	2.48	4.0E-36	11497041	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), transcript variant 3, mRNA
7815	20858	34246	1.74	4.0E-36	M33320.1	NT	Human platelet Glycoprotein Iib (GPIIb) gene, exons 2-28
8901	21867	35290	1.2	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8901	21867	35291	1.2	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
11332	24282	37806	1.8	4.0E-36	AA400370.1	EST_HUMAN	zu68c10.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:743250 5'
12471	25220		1.86	4.0E-36	11420516	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
12515	25768		8.26	4.0E-36	AV753629.1	EST_HUMAN	AV753629 TP Homo sapiens cDNA clone TPGABH01 5'
697	13769	26691	3.9	3.0E-36	AF089810.1	NT	Homo sapiens neurodin III-alpha gene, partial cds
1497	14530	27502	0.97	3.0E-36	AF110239.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
1497	14530	27503	0.97	3.0E-36	AF110239.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
4530	17554	30442	6.81	3.0E-36	10181139	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
3184	18239	29157	2.17	2.0E-36	BE256267.1	EST_HUMAN	601106343F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3342706 5'
4996	18011	30898	8.63	2.0E-36	AW980376.1	EST_HUMAN	QV0-OT0030-240300-174-h04 OT0030 Homo sapiens cDNA
5563	18660	31606	2.52	2.0E-36	AF267747.1	NT	Mus musculus p47-phox gene, complete cds
5948	19034	32227	3.89	2.0E-36	T08756.1	EST_HUMAN	EST06848 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBBJ28 5' end
6728	19784	33063	12.4	2.0E-36	T86629.1	EST_HUMAN	yc44a07.r1 Stragogene liver (#337224) Homo sapiens cDNA clone IMAGE:83508 5'
9743	22884	36138	0.82	2.0E-36	BF512794.1	EST_HUMAN	UHH-BW1-enu-a-11-O-U1.51 NCI_COAP_Sub7 Homo sapiens cDNA clone IMAGE:3071132 3'
9907	22728	36184	0.57	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9907	22728	36185	0.57	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
888	13941	26899	2.74	1.0E-36	BE408310.1	EST_HUMAN	601300839F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
2155	15171	28189	1.06	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2165	15171	28190	1.06	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2212	15227	28249	1.35	1.0E-36	BF673761.1	EST_HUMAN	602138493F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272888 5'
3355	16406		1.34	1.0E-36	AF166882.1	NT	Homo sapiens human endogenous retrovirus W provirus (pro) gene, partial cds
5818	18908	32062	0.82	1.0E-36	AL044446.1	EST_HUMAN	DKFZp43-G022_r1 434 (synonym: hbae3) Homo sapiens cDNA clone DKFZp43-G022 5'
6003	19086	32286	1.3	1.0E-36	4827064	NT	Homo sapiens zinc finger protein 147 (estrogen-responsive finger protein) (ZNF147) mRNA
6307	19378		3.86	1.0E-36	AU67714.1	EST_HUMAN	wb37c12.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307862 3' similar to contains Alu repetitive element
6529	19592	32852	1.34	1.0E-36	R25012.1	EST_HUMAN	y938g10.l1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34529 5' similar to SP-CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN;
6528	19592	32853	1.34	1.0E-36	R25012.1	EST_HUMAN	y938g10.l1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34529 5' similar to SP-CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN;
6839	19892	33187	0.7	1.0E-36	AL120542.1	EST_HUMAN	DKFZp761A228_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A228 5'
8293	21262	34671	2.77	1.0E-36	AA148034.1	EST_HUMAN	z651a12.l1 StrataGene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
8293	21262	34672	2.77	1.0E-36	AA148034.1	EST_HUMAN	z651a12.l1 StrataGene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
8388	21357	34764	1.15	1.0E-36	AA420467.1	EST_HUMAN	nc60e08.l1 NCL_CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
8388	21357	34765	1.15	1.0E-36	AA420467.1	EST_HUMAN	nc60e08.l1 NCL_CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
8520	21488	34902	0.48	1.0E-36	AU141688.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
8520	21488	34903	0.48	1.0E-36	AU141688.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
9394	22349	35781	2.72	1.0E-36	AW103658.1	EST_HUMAN	x62b07.x1 NCL_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2614357 3'
10473	23395	36392	3.95	1.0E-36	BF364169.1	EST_HUMAN	QV3-NN1023-010600-198-h01 NN1023 Homo sapiens cDNA
10691	23613	37107	0.65	1.0E-36	AW855888.1	EST_HUMAN	RC3-CT0278-040500-017-a10 CT0278 Homo sapiens cDNA
10691	23613	37108	0.65	1.0E-36	AW855888.1	EST_HUMAN	RC3-CT0278-040500-017-a10 CT0278 Homo sapiens cDNA
11294	24244	37771	2.84	1.0E-36	AW897636.1	EST_HUMAN	CM3-NN0061-140400-147-h12 NN0061 Homo sapiens cDNA
11709	24674	38251	2.98	1.0E-36	AW504143.1	EST_HUMAN	UHF-BNO-ale-c-03-0-UL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078277 5'
12338	25136		6.51	1.0E-36	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12777	25414		4.97	1.0E-36	AL163213.2	NT	Homo sapiens chromosome 21 segment H521C013
13034	25579		4.02	1.0E-36	AF202723.1	NT	Homo sapiens Sac1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
7607	20568	33929	2.3	9.0E-37	AW009277.1	EST_HUMAN	w80b07.x1 NCL_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504245 3'
7607	20568	33930	2.3	9.0E-37	AW009277.1	EST_HUMAN	w80b07.x1 NCL_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504245 3'
3366	16416	29342	1.17	8.0E-37	4757879	NT	Homo sapiens chimerin (chimerin) 2 (CHIN2) mRNA
6320	18426		1.6	8.0E-37	BE688077.1	EST_HUMAN	CMO-JT0003-050800-503-d09 JT0003 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5927	19013	32206	3.73	8.0E-37	BE360127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
5927	19013	32208	3.73	8.0E-37	BE360127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
5977	19082	32263	6.06	8.0E-37	AW840840.1	EST_HUMAN	RC1-CN0008-210100-012-a09_1 CN0008 Homo sapiens cDNA H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
8216	21185	34595	6.98	8.0E-37	X97344.1	NT	
1289	14324		2.33	7.0E-37	AL042800.1	EST_HUMAN	DKFZp434E0422_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434E0422 5'
1789	14788	27773	0.92	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
1789	14788	27774	0.92	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
5161	18170	31049	1.56	7.0E-37	AW988823.1	EST_HUMAN	EST380899 IMAGE resequences, MAGJ Homo sapiens cDNA
11109	24089	37691	8.45	7.0E-37	A1817700.1	EST_HUMAN	wk25b11.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413341 3' similar to contains PTR5.12 PTR5 repetitive element;
11241	24194	37712	1.83	7.0E-37	A1536702.1	EST_HUMAN	h087g03.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2165140 3' similar to contains L1.b3 L1 repetitive element;
8782	21749	35171	0.59	6.0E-37	AF169889.1	NT	Homo sapiens protocadherin alpha 10 alternate isoform (PCDH-alpha10) mRNA, complete cds
12803	25487		3.58	6.0E-37	AF202723.1	NT	Homo sapiens Sad1 uno-84 domain protein 2 (SUN2) mRNA, partial cds
6212	19288	32518	4.33	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
6212	19288	32519	4.33	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
9109	22075	35601	0.88	5.0E-37	AV750211.1	EST_HUMAN	AV750211 NPC Homo sapiens cDNA clone NPC8GH09 5'
11285	24217		3.87	5.0E-37	7657117	NT	Homo sapiens glycine C-acetyltransferase (2-amino-3-hydroxybutyrate-CoA ligase) (GCAT), mRNA
12333	25183		6.43	5.0E-37	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
2431	15438	28455	2.41	4.0E-37	AA702794.1	EST_HUMAN	z69b04.s1 Scores_fetal_liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4814	17831	30729	1.05	4.0E-37	M10876.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
5268	18276		0.93	4.0E-37	N62051.1	EST_HUMAN	EST62g10 WATM1 Homo sapiens cDNA clone 52g10 similar to human STS G04101
6419	19486	32735	0.69	4.0E-37	AW794502.1	EST_HUMAN	RC8-UM0014-210200-021-H05 UM0014 Homo sapiens cDNA
9711	22684	36121	0.57	4.0E-37	AA843808.1	EST_HUMAN	ak08-c02.s1 Scores_parathyroid_tumor_NBRIPA Homo sapiens cDNA clone IMAGE:1405442 3'
2033	15052	28068	3.07	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L2418
2033	15052	28069	3.07	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L2418
2519	15522		1.74	3.0E-37	AW961150.1	EST_HUMAN	EST373222 IMAGE resequences, MAGF Homo sapiens cDNA
2976	16034		3.71	3.0E-37	AW961150.1	EST_HUMAN	EST373222 IMAGE resequences, MAGF Homo sapiens cDNA
5664	16049	32260	0.73	3.0E-37	AL138274.1	EST_HUMAN	DKFZp547G087_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547G087 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7804	20754	34130	0.75	3.0E-37	AJ748852.1	EST_HUMAN	af24a05.x1 Barabed codon HPLRB7 Homo sapiens cDNA clone IMAGE:2373888 3' similar to TR-Q13537
381	13494	26426	3.06	2.0E-37	D89780.1	NT	Q13537 SIMILAR TO POGO ELEMENT. ;
381	13494	26427	3.06	2.0E-37	D89780.1	NT	Homo sapiens mRNA for AML1, complete cds
1082	14126	27079	2.48	2.0E-37	AU131202.1	EST_HUMAN	Homo sapiens mRNA for AML1, complete cds
1082	14126	27080	2.49	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
1981	15002	28005	2.43	2.0E-37	AL163247.2	NT	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
3908	16948	29859	5.24	2.0E-37	4503210	NT	Homo sapiens chromosome 21 segment HS21C047
5462	18594		0.74	2.0E-37	BF035327.1	EST_HUMAN	Homo sapiens cytochrome P450, subfamily XXVIIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1b) mRNA
6898	19763	33030	0.95	2.0E-37	11890617	NT	60145853 F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862088 5'
6816	19870	33159	3.92	2.0E-37	AA346720.1	EST_HUMAN	Homo sapiens mouse thiamin pyrophosphokinase homolog (TPK1), mRNA
8329	21298	34713	0.51	2.0E-37	BE537784.1	EST_HUMAN	EST62831 Fetal heart II Homo sapiens cDNA 5' end
8329	21298	34714	0.51	2.0E-37	BE537784.1	EST_HUMAN	601067634 F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453657 5'
8372	21341	34752	3.33	2.0E-37	BF204032.1	EST_HUMAN	601067634 F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453657 5'
11885	24766	38553	8.89	2.0E-37	AF176013.1	NT	60186915 F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4111406 5'
12738	25607		1.51	2.0E-37	11417872	NT	Homo sapiens J domain containing protein 1 isoform b (JDP1) mRNA, complete cds
13074	25607		4.68	2.0E-37	11417872	NT	Homo sapiens pascadillo (zabratfish) homolog 1, containing BRCT domain (PES1), mRNA
2069	15116	28138	5.41	1.0E-37	AL163281.2	NT	Homo sapiens pascadillo (zabratfish) homolog 1, containing BRCT domain (PES1), mRNA
3985	17025	29936	4.56	1.0E-37	AF188011.1	NT	Homo sapiens chromosome 21 segment HS21C081
4191	17222	30111	1.09	1.0E-37	BE872365.1	EST_HUMAN	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4978	17893	30882	2.21	1.0E-37	BF371718.1	EST_HUMAN	601448819 F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3852662 5'
6119	19197		1.01	1.0E-37	7305360	NT	QV0-FN0180-280700-318-c10 FN0180 Homo sapiens cDNA
8557	21525	34943	0.7	1.0E-37	BE546032.1	EST_HUMAN	Mus musculus atogelin (Obog), mRNA
9087	22033	35476	3.45	1.0E-37	AA171406.1	EST_HUMAN	601072419 F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458308 5'
10971	23891	37405	0.44	1.0E-37	AV730743.1	EST_HUMAN	zp21b02.r1 Stragene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:310059 5' similar to contains L1.12 L1 repetitive element ;
11058	24019	37542	2.07	1.0E-37	M22878.1	NT	AV730743 HTF Homo sapiens cDNA clone HTFAHG10 5'
12646	25329		4.28	1.0E-37	BE771814.1	EST_HUMAN	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
5872	18961	32150	1.67	9.0E-38	10048482	NT	CN3-F10096-140700-243-d07 F10096 Homo sapiens cDNA
1228	14284	27221	1.85	8.0E-38	11436955	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo (LOC56768), mRNA
2506	15509	28536	2.16	8.0E-38	BF346221.1	EST_HUMAN	Homo sapiens Grib2-associated binder 2 (KIAA00571), mRNA
12698	14264	27221	1.44	8.0E-38	11436955	NT	60201840 F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153992 5'
3055	16112	29027	1.88	6.0E-38	BF033033.1	EST_HUMAN	Homo sapiens Grib2-associated binder 2 (KIAA00571), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5670	18785	31835	1.48	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5670	18785	31838	1.48	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
7650	20513	33871	0.51	6.0E-38	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
7613	20573	33836	0.74	6.0E-38	AJ010869.1	NT	Homo sapiens mRNA for potassium channel Kv4.2
7613	20573	33837	0.74	6.0E-38	AJ010869.1	NT	Homo sapiens mRNA for potassium channel Kv4.2
12188	26035		3.19	6.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
12677	26347	31785	18.01	6.0E-38	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
13052	25733	31616	1.68	6.0E-38	11418164	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
728	13789	26724	1.28	5.0E-38	AW971819.1	EST_HUMAN	EST383908 IMAGE resequencing, MAGI Homo sapiens cDNA
2460	15484	28487	1.24	5.0E-38	AJ237740.1	NT	Homo sapiens RIBLIR gene (partial), exon 8
7228	20250	33584	1.8	5.0E-38	BE971810.1	EST_HUMAN	601450148F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854074 5'
119	13228	26154	3.65	4.0E-38	Z25468.1	NT	B. taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
119	13228	26155	3.65	4.0E-38	Z25468.1	NT	B. taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
2110	15127		3.98	3.0E-38	AFO03530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
3710	16763		1.24	3.0E-38	7549807	NT	Homo sapiens HIPA interacting protein 4 (dual-like) (HIRIP4), mRNA
3869	16908	29817	1.68	3.0E-38	P33538	SWISSPROT	SSU72 PROTEIN
3869	16908	29818	1.68	3.0E-38	P33538	SWISSPROT	SSU72 PROTEIN
6917	25671	33284	7.83	3.0E-38	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
7455	20421	33776	0.6	3.0E-38	AW302461.1	EST_HUMAN	xw04d01.x1 NC1_CGAP_Bmf53 Homo sapiens cDNA clone IMAGE:2827008 3'
7832	20780		0.57	3.0E-38	AA378327.1	EST_HUMAN	EST191188 Synovial sarcoma Homo sapiens cDNA 5' end
7844	20791	34167	6.28	3.0E-38	BF373884.1	EST_HUMAN	CM3-FT0181-140700-241-467 FT0181 Homo sapiens cDNA
8897	21863	35388	1.97	3.0E-38	H85494.1	EST_HUMAN	yw88504.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:249776 5'
8897	21863	35389	1.97	3.0E-38	H85494.1	EST_HUMAN	yw88504.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:249775 5'
10331	23255		2.06	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
12809	18333	31171	1.46	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
52	13172	26081	2.54	2.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
1380	14414	27384	2.28	2.0E-38	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
1653	14685	27659	2.07	2.0E-38	AA437353.1	EST_HUMAN	xw30d01.1 Soares ovary tumor NblHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW-MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
1653	14685	27660	2.07	2.0E-38	AA437353.1	EST_HUMAN	xw30d01.1 Soares ovary tumor NblHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW-MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
2418	15425	28448	1.11	2.0E-38	W76571.1	EST_HUMAN	zif66g09.1 Soares_fetal_heart_NblH19W Homo sapiens cDNA clone IMAGE:346884 5'
6271	18160	31040	0.79	2.0E-38	AA437181.1	EST_HUMAN	xw61d08.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:768129 5' similar to TR:G817957 G817957 GLYCINE RECEPTOR SUBUNIT ALPHA 4 ;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5807	18897	32079	0.61	2.0E-38	Z26634.2	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
5807	18897	32080	0.61	2.0E-38	Z26634.2	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
7988	20827	94322	1.27	2.0E-38	AV721103.1	EST_HUMAN	AV721103 HTB Homo sapiens cDNA clone HTBARH11 5'
8828	21785		5.59	2.0E-38	BE165980.1	EST_HUMAN	MF3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8248	22212	35642	0.55	2.0E-38	F06450.1	EST_HUMAN	HSC18F031 normalized Infant brain cDNA Homo sapiens cDNA clone c-18F03
8316	22281	35711	1.21	2.0E-38	AF068756.1	NT	Homo sapiens orphan G protein-coupled receptor HC20 (HG20) mRNA, complete cds
9578	22538		1.04	2.0E-38	BE222256.1	EST_HUMAN	hu08g02x1 NCJ CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166130 3' similar to TRC002710 C02710
10816	23736	37239	1.74	2.0E-38	D63479.2	NT	GAG POLYPROTEIN.
11819	24702	38284	4.62	2.0E-38	BE712790.1	EST_HUMAN	Homo sapiens mRNA for KIAA0145 protein, partial cds
11955	24834	38429	3.66	2.0E-38	AF190501.1	NT	QV2-HT0898-080800-283-a05 HT0898 Homo sapiens cDNA
11955	24834	38430	3.66	2.0E-38	AF190501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12240	25071		3.39	2.0E-38	AV726988.1	EST_HUMAN	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12242	25072		2.13	2.0E-38	AB012723.1	NT	AV726988 HTC Homo sapiens cDNA clone HTCAH07 5'
12538	25262		2.61	2.0E-38	M55630.1	NT	Homo sapiens gene for kinesin-like protein, complete cds
12548	25271	31810	6.8	2.0E-38	H55941.1	EST_HUMAN	Human topoisomerase I pseudogene 2
13065	25599		3	2.0E-38	11418248	NT	CHR220580 Chromosome 22 exon Homo sapiens cDNA clone C22_788 5'
1095	14139		2.38	1.0E-38	AA401570.1	EST_HUMAN	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
2015	15036	28047	1.92	1.0E-38	4886288	NT	zu62b-02.L1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:742639 5' similar to contains element
2035	15054	28071	1.17	1.0E-38	7661989	NT	MER19 repetitive element;
2602	15505	28532	2.01	1.0E-38	AF270831.1	NT	Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA
4162	17213	30101	0.99	1.0E-38	AB037863.1	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
4352	17379	30259	10.48	1.0E-38	AL163203.2	NT	Homo sapiens cyclin K (CCNK) gene, exon 7
4352	17379	30280	10.48	1.0E-38	AL163203.2	NT	Homo sapiens mRNA for KIAA1442 protein, partial cds
4827	17848	30538	0.93	1.0E-38	8022543	NT	Homo sapiens chromosome 21 segment HS21C003
5143	18152	31032	0.77	1.0E-38	AA077528.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
6143	18218	32447	6.58	1.0E-38	7305360	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
6143	18218	32448	6.58	1.0E-38	7305360	NT	7B44H06 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B44H06
7684	20594	33957	3.03	1.0E-38	AB014512.1	NT	Mus musculus otogelin (Otog), mRNA
9508	22471	35815	0.55	1.0E-38	11422250	NT	Mus musculus otogelin (Otog), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9765	22708	36162	6.34	1.0E-38	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29.b3 MER29 repetitive element;
12401	25712		2.08	1.0E-38	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
58	13176	26087	5.73	8.0E-39	4602312	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 16kD (ATP6C) mRNA
1395	14428	27398	0.94	8.0E-39	4758228	NT	Homo sapiens estrogen receptor-binding fragment-associated gene 9 (EBAG9) mRNA wh53f10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:23844491 3' similar to TR:P87860 P87860
1846	14872		1.54	8.0E-39	AI823404.1	EST_HUMAN	POL PROTEIN;
2105	15122	28142	5.19	7.0E-39	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
11160	24116	37645	1.8	6.0E-39	BF331829.1	EST_HUMAN	QV1-BT0631-040900-357-402 BT0631 Homo sapiens cDNA
12981	25545		3.12	8.0E-39	BE570394.1	EST_HUMAN	7c34c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284356 3' similar to WPR161.6 CE00828;
1009	14058	27010	1.43	5.0E-39	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
2968	16056	28976	8.13	5.0E-39	AI750154.1	EST_HUMAN	a38504.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2374063 3' similar to TR:Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT ;contains LTR7.1 LTR7 repetitive element;
12689	25356		2.82	5.0E-39	11420289	NT	Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA
562	13622	26542	20.77	4.0E-39	AB015610.1	NT	Chlorococcus acidiphilus mRNA for ribosomal protein S4X, complete cds
3587	16632	29550	0.92	4.0E-39	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5928	19014	32207	0.65	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
5928	19014	32208	0.65	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
8411	21380	34786	1.14	4.0E-39	AA682949.1	EST_HUMAN	ae82g04.s1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1020438 3' similar to contains OFR.b1 ORF repetitive element;
9684	22637	36062	0.61	4.0E-39	DB4116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
9684	22637	36063	0.61	4.0E-39	DB4116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
12704	25363		3.29	4.0E-39	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12819	25441		3.15	4.0E-39	BE636452.1	EST_HUMAN	QV0-FN0063-260600-278-006 FN0063 Homo sapiens cDNA
49	13169	26076	14.8	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
49	13169	26076	14.8	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
49	13169	26077	14.8	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
12233	25065	38163	6.14	3.0E-39	AI084557.1	EST_HUMAN	ae63a10.s1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;
12233	25065	38164	6.14	3.0E-39	AI084557.1	EST_HUMAN	ae63a10.s1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12282	25100		11.18	3.0E-39	H37903.1	EST_HUMAN	yp51c08.s1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:180864 3'
898	13953		9.79	2.0E-39	BE408203.1	EST_HUMAN	801301607F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636289 5'
913	13988		13.84	2.0E-39	AE25119.1	EST_HUMAN	protrima-7.D01.r bvtumor Homo sapiens cDNA 5'
1033	14079		4.67	2.0E-39	AF000573.1	NT	Homo sapiens homocitrate 1,2-dioxygenase gene, complete cds
1532	14665		24.51	2.0E-39	AW372318.1	EST_HUMAN	PMO-B70340-211289-003-002 BT0340 Homo sapiens cDNA
1890	15011		3.62	2.0E-39	AA720574.1	EST_HUMAN	inv21g02.s1 NCL_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR13
2636	15635	28017		2.0E-39	AA720574.1	EST_HUMAN	THR repetitive element;
4431	17458	28859	2.3	2.0E-39	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
5588	18685	30349	1.58	2.0E-39	BF370207.1	EST_HUMAN	RC4-FN0037-280700-011-a10 FN0037 Homo sapiens cDNA
7694	20555	31624	4.2	2.0E-39	AA508880.1	EST_HUMAN	hg88f03.s1 NCL_CGAP_P16 Homo sapiens cDNA clone IMAGE:941683
7776	20729	33915	2.34	2.0E-39	AA080867.1	EST_HUMAN	zn06f02.r1 Strategene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:548651 5'
7778	20729	34101	0.61	2.0E-39	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8653	21621	34102	0.61	2.0E-39	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
9851	22787	35041	0.58	2.0E-39	AF078778.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9884	22811		1.32	2.0E-39	AA984531.1	EST_HUMAN	sm88c11.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:1630188 3'
11761	24889	38271	0.53	2.0E-39	AI686660.1	EST_HUMAN	tu35e03.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2253052 3'
1516	14548	27520	2.58	2.0E-39	D88994.1	NT	Human mRNA for KIAA0209 gene, partial cds
1516	14548	27521	3.52	1.0E-39	AJ008345.1	NT	Homo sapiens KVLQ11 gene
1533	14569	27535	3.52	1.0E-39	AJ008345.1	NT	Homo sapiens KVLQ11 gene
4689	17710	30803	8.86	1.0E-39	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4689	17710	30804	8.87	1.0E-39	AW951995.1	EST_HUMAN	EST384065 IMAGE resequences, MAG8 Homo sapiens cDNA
4731	17751	30843	8.87	1.0E-39	AW951995.1	EST_HUMAN	EST384065 IMAGE resequences, MAG8 Homo sapiens cDNA
5432	18534	31442	8.48	1.0E-39	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
5432	18534	31443	8.48	1.0E-39	7657020	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
5711	18805	31982	0.87	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
5747	18841	32023	0.87	1.0E-39	11417342	NT	yd28g08.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:109402 5' similar to contains
5747	18841	32024	1.2	1.0E-39	T80878.1	EST_HUMAN	Alu repetitive element; contains LTR1 repetitive element;
7000	20126		4.7	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X1 (NIX1) (Nix1 gene)
7589	20550	33911	4.7	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X1 (NIX1) (Nix1 gene)
8910	21876	35302	1.68	1.0E-39	11438736	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
			2.1	1.0E-39	D78132.1	NT	Homo sapiens mRNA for ras-related GTP-binding protein, complete cds
			0.96	1.0E-39	Q46530	SWISSPROT	RIBONUCLEASE K6 PRECURSOR (RNAse K6)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
657	13827	28545	1.8	9.0E-40	5803210	NT	Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA
1239	14275	27234	14.84	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1), mRNA
1239	14275	27235	14.84	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1), mRNA
1443	14476	27453	0.99	9.0E-40	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3), mRNA
3799	16339	29746	0.88	9.0E-40	4503784	NT	Homo sapiens fragile X mental retardation 1 (FMR1), mRNA
3897	18315	29943	4.05	9.0E-40	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4527	17401	30281	0.78	9.0E-40	4507849	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
3054	16111	29028	0.91	8.0E-40	AA078165.1	EST_HUMAN	7H15A04 Chromosome 7 HeLa cDNA Library Homo sapiens cDNA clone 7H15A04
3945	16985		2.39	8.0E-40	BE386541.1	EST_HUMAN	60128859F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619186 5'
7685	20924	34317	2.22	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
7985	20924	34318	2.22	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
11243	24196	37715	1.76	7.0E-40	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
2737	15731	28746	7.5	6.0E-40	AA391275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to similar to zinc finger protein family
2737	15731	28747	7.5	6.0E-40	AA391275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to similar to zinc finger protein family
6049	19130		2.06	6.0E-40	BE504786.1	EST_HUMAN	h240g01.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:3210480 3'
6270	19343		1.32	6.0E-40	7681999	NT	Homo sapiens KIAA0211 gene product (KIAA0211), mRNA
7121	20055	33359	3.38	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
7121	20055	33360	3.38	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
10336	23260	36738	9.47	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDGF04 3'
10336	23260	36739	9.47	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDGF04 3'
2812	15811	28635	1.12	5.0E-40	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1894	14919	27915	3.21	4.0E-40	AI686005.1	EST_HUMAN	1691501.x1 NCL CGAP_P128 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR-O79505 O79505 POL PROTEIN. ;
2117	15134		2.22	4.0E-40	AF003528.1	NT	Homo sapiens X-linked ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4415	17442	30333	8.57	4.0E-40	7682117	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8218	21187	34597	0.44	4.0E-40	AU127831.1	EST_HUMAN	AU127831 NT2RP2 Homo sapiens cDNA clone NT2RP2002172 5'
8324	21293	34707	4.81	4.0E-40	AA742809.1	EST_HUMAN	nv34e10.11 NCL CGAP_B14 Homo sapiens cDNA clone IMAGE:1222122
9410	22375	35812	5.53	4.0E-40	BE009416.1	EST_HUMAN	PMO-BND167-070500-002-h12 BND167 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9410	22375	35813	5.53	4.0E-40	BE008416.1	EST_HUMAN	PMO-BN0167-070600-002-H12 BN0167 Homo sapiens cDNA
11071	24033	37557	1.66	4.0E-40	AW841595.1	EST_HUMAN	RC1-CN0017-120200-012-e04 CN0017 Homo sapiens cDNA
4158	17189	30077	1.02	3.0E-40	AI925949.1	EST_HUMAN	wh1207.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2380549 3'
6607	19865	32840	0.66	3.0E-40	4506736	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
6798	19850	33135	7.89	3.0E-40	11417342	NT	Homo sapiens serpin domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMASA), mRNA
8724	21692	35118	3.94	3.0E-40	5454167	NT	Homo sapiens HBV associated factor (XAP-4) mRNA
9320	22285	35715	1.23	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9666	22528	35977	1.34	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
11597	24535	38092	9.3	3.0E-40	6005813	NT	Homo sapiens serine threonine protein kinase (NDR), mRNA
325	13416		4.69	2.0E-40	AI223036.1	EST_HUMAN	ig52109.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1838947 3'
795	13854		29.29	2.0E-40	AW930388.1	EST_HUMAN	XZ4910.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2761088 3' similar to SW-RS5_MOUSE
1842	14868		1.77	2.0E-40	AV731601.1	EST_HUMAN	P97481 40S RIBOSOMAL PROTEIN S5 ;
1951	14974	27973	1.94	2.0E-40	4506188	NT	AV731601 HTF Homo sapiens cDNA clone HTFAZE06 5'
1951	14974	27974	1.94	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2085	15102	28119	1.01	2.0E-40	AB88582.1	EST_HUMAN	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2179	15194	28215	1.84	2.0E-40	5453582	NT	w80a11.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2514716 3' similar to TR:Q91829 Q91829
2700	15696		1.79	2.0E-40	BE275832.1	EST_HUMAN	ZINC FINGER PROTEIN ;
3143	16200	28111	4.44	2.0E-40	5453582	NT	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
4937	17953	30845	1.7	2.0E-40	AL163280.2	NT	601121567F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345784 5'
4937	17953	30846	1.7	2.0E-40	AL163280.2	NT	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
6237	18245	31117	1.12	2.0E-40	4505980	NT	Homo sapiens chromosome 21 segment HS21O080
884	13639		1.63	1.0E-40	AA225888.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21O080
2628	15628	28653	1.47	1.0E-40	BF036881.1	EST_HUMAN	Homo sapiens plasminogen (PLG) mRNA
2696	15692		1.54	1.0E-40	BE018348.1	EST_HUMAN	nc09a09.x1 NCL_CGAP_P71 Homo sapiens cDNA clone IMAGE:1007608
2747	15740	28766	1.38	1.0E-40	BF541030.1	EST_HUMAN	601460375F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3663803 5'
2747	15740	28767	1.38	1.0E-40	BF541030.1	EST_HUMAN	602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067738 5'
3309	16362		1.58	1.0E-40	4507142	NT	602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067738 5'
4940	17661	30549	4.18	1.0E-40	4508012	NT	Homo sapiens sorting heparin 3 (SNX3) mRNA
							Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6384	19452	32696	0.73	1.0E-40	W92708.1	EST_HUMAN	zh79f11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
6384	19452	32696	0.73	1.0E-40	W92708.1	EST_HUMAN	zh79f11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7283	20285	33598	1.92	1.0E-40	AA573201.1	EST_HUMAN	nt42f04.s1 NCL_CGAP_AA1 Homo sapiens cDNA clone IMAGE:986167 3'
7283	20285	33600	1.92	1.0E-40	AA573201.1	EST_HUMAN	nt42f04.s1 NCL_CGAP_AA1 Homo sapiens cDNA clone IMAGE:986167 3'
7443	20409	33761	0.84	1.0E-40	P26808	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
11262	24214	37736	2.42	1.0E-40	AU149345.1	EST_HUMAN	AU149345 NT2RM4 Homo sapiens cDNA clone NT2RM4002122 3'
12659	25847		14.2	1.0E-40	BF334112.1	EST_HUMAN	MR2-CT0222-211099-002-s10 G10222 Homo sapiens cDNA
12813	25822		1.84	1.0E-40	Z00015.1	NT	H. sapiens V(k) gene low repetitive L-family member (cos 20)
8254	21223	34633	1.59	8.0E-41	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
829	15852	26840	1.81	7.0E-41	AI934394.1	EST_HUMAN	wp04f04.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
829	15852	26841	1.81	7.0E-41	AI934394.1	EST_HUMAN	wp04f04.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5337	18442	31169	0.95	7.0E-41	11545770	NT	Homo sapiens hypothetical protein FLJ13188 (FLJ13188), mRNA
6124	19202	32426	2.97	7.0E-41	11419208	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
6488	19553	32803	1.08	7.0E-41	11433010	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
7186	18417	31218	0.88	7.0E-41	UT2335.1	NT	Human platelet activating factor acetylhydrolase, brain isoform, 45 kDa subunit (LIS1) gene, exons 3 and 4
11763	24691	38272	2.8	7.0E-41	4758445	NT	Homo sapiens guanine nucleotide binding protein 10 (GNNG10) mRNA
13072	25844		10.83	7.0E-41	11417972	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
280	13375	26304	0.65	6.0E-41	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
2120	16137	28167	1.67	6.0E-41	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
8304	21273	34694	1.59	6.0E-41	BF613783.1	EST_HUMAN	UHH-BW1-arrp-b-03-0-J1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070421 3'
1819	14848	27838	1.75	5.0E-41	T62628.1	EST_HUMAN	yc03e10.s1 Stragene lung (#637210) Homo sapiens cDNA clone IMAGE:70626 3'
4134	17168		1.03	5.0E-41	4885636	NT	Homo sapiens target of myb1 (chicken) homolog (TOM1), mRNA
6888	19755		2.06	5.0E-41	BE067042.1	EST_HUMAN	PM4-BT0341-251198-002-F11 BT0341 Homo sapiens cDNA
391	13468		1.73	4.0E-41	BE156318.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
1100	14141	27094	1.16	4.0E-41	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005683 5'
1408	14441	27411	9.16	4.0E-41	AI027117.1	EST_HUMAN	ow45e08.s1 Soares_parenthoid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE, contains LTR5.b1 LTR5 repetitive element;
1408	14441	27412	9.16	4.0E-41	AI027117.1	EST_HUMAN	ow45e08.s1 Soares_parenthoid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE, contains LTR5.b1 LTR5 repetitive element;
1420	14453	27427	2.75	4.0E-41	AB008681.1	NT	Homo sapiens gene for actinin receptor type IIB, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1641	14673	27846	6.9	4.0E-41	AI500406.1	EST_HUMAN	tr186c04.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2165968 3' similar to contains OFR.b1 OFR repetitive element:
2889	15958	28876	3.58	4.0E-41	AJ22041.1	NT	Homo sapiens 950 kb contig between AML 1 and CBR1 on chromosome 21q22, segment 1/3
2890	15958	28877	3.56	4.0E-41	AJ22041.1	NT	Homo sapiens 950 kb contig between AML 1 and CBR1 on chromosome 21q22, segment 1/3
4168	17109	30035	2.28	4.0E-41	X02885.1	NT	H.sapiens DNase I hypersensitive site (HSS-3) enhancer element
6658	19715		1.31	4.0E-41	AV758295.1	EST_HUMAN	AV758295 BM Homo sapiens cDNA clone BMFBHC06 5'
10052	22979	36446	8.41	4.0E-41	BF304683.1	EST_HUMAN	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
11881	24858		11.56	4.0E-41	AV710480.1	EST_HUMAN	AV710480 Cu Homo sapiens cDNA clone QuAAC007 5'
947	14000	26952	2.51	3.0E-41	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
4362	17389	30271	2.6	3.0E-41	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5148	18157		1.15	3.0E-41	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
5569	18698	31625	9.46	3.0E-41	X87689.1	NT	H.sapiens mRNA for putative p64 CLCP protein
6618	19681	32839	1.61	3.0E-41	AB037808.1	NT	Homo sapiens mRNA for KIAA1387 protein, partial cds
7473	20439	33797	0.82	3.0E-41	AA359168.1	EST_HUMAN	EST184883 Jurkat T-cells VI Homo sapiens cDNA 5' end
8072	21009	34407	0.52	3.0E-41	R54795.1	EST_HUMAN	y75d08.L1 Soares breast 2NbHbT Homo sapiens cDNA clone IMAGE:154575 5'
12116	24988	38587	3.46	3.0E-41	AW994941.1	EST_HUMAN	QV0-BN0040-170300-160-H08 BN0040 Homo sapiens cDNA
12116	24988	38588	3.46	3.0E-41	AW994941.1	EST_HUMAN	QV0-BN0040-170300-160-H08 BN0040 Homo sapiens cDNA
12195	25040		1.49	3.0E-41	AA609788.1	EST_HUMAN	cd177f10.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1031847 3'
1841	14595	27570	15.21	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
1975	14998	27898	2.16	2.0E-41	AA331940.1	EST_HUMAN	EST135818 Embryo, 8 week I Homo sapiens cDNA 5' end
2228	16242	28207	1.37	2.0E-41	D88982.1	NT	Human mRNA for KIAA0207 gene, complete cds
2278	15289	28314	4.43	2.0E-41	X89631.1	NT	G gorilla DNA for ZNF80 gene homolog
2839	14595	27670	7.99	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
3851	16891	28795	0.9	2.0E-41	5032108	NT	Homo sapiens con of sevenless (Drosophila) homolog 1 (SOS1) mRNA
4652	17673	30580	1.13	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4652	17673	30581	1.13	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
5617	18713	31871	0.61	2.0E-41	AA584575.1	EST_HUMAN	no12807.s1 NCL CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100460 3' similar to gb:U52851_mae1 PEPTIDYL-PROLYL CIS-TRANS ISOMERASE A (HUMAN);
6782	18837	33121	0.85	2.0E-41	4504778	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
7835	20877	34287	6.36	2.0E-41	AF039404.1	NT	Homo sapiens homolog of Nedd5 (Nedd5) mRNA, complete cds
8148	21085	34484	0.6	2.0E-41	11422047	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORCL5), mRNA
8403	21372	34780	1.63	2.0E-41	MB9944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
8403	21372	34781	1.63	2.0E-41	MB9944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8433	21402	34815	1.47	2.0E-41	AA328285.1	EST_HUMAN	EST31723 Embryo, 12 week Homo sapiens cDNA 5' end
9326	22281	35721	1.61	2.0E-41	P52742	SWISSPROT	ZINC FINGER PROTEIN 135
9772	22713	36167	0.72	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9772	22713	36168	0.72	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
11815	24700	38281	2.21	2.0E-41	AA372637.1	EST_HUMAN	EST84556 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
3219	16274	29197	1.33	1.0E-41	BE869735.1	EST_HUMAN	601445847F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
3219	16274	29198	1.33	1.0E-41	BE869735.1	EST_HUMAN	601445847F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
4588	17619	30512	7.8	1.0E-41	6878468	NT	Mus musculus tubulin alpha 6 (Tubae6), mRNA
7028	18368	31278	0.49	1.0E-41	H99079.1	EST_HUMAN	YK18003.s1 Soares melanocyte 2Nbr-1M Homo sapiens cDNA clone IMAGE:282061 3'
9773	22714	36169	1.73	1.0E-41	A1217898.1	EST_HUMAN	q775610.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755858 3'
11494	24437	37886	1.58	1.0E-41	AW847812.1	EST_HUMAN	IL3-CT0213-190200-040-F09 CT0213 Homo sapiens cDNA
12332	25132		2.72	1.0E-41	11628291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
8885	21632		1.06	9.0E-42	BE179191.1	EST_HUMAN	RC0-HT0613-270300-032-g01 HT0613 Homo sapiens cDNA
9529	22492	35939	3.08	9.0E-42	11580151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9529	22492	35940	3.08	9.0E-42	11600161	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
463	13539	26462	6.85	8.0E-42	AF003530.1	NT	Homo sapiens homeobox protein GDX4 (GDX4) gene, complete cds and flanking repeat regions
2118	16135	28155	1.18	8.0E-42	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5197	18206	31080	1.06	8.0E-42	6679031	NT	Mus musculus neural precursor cell expressed, developmentally down-regulated gene 1 (Nedd1), mRNA
12376	25850		28	8.0E-42	AA469898.1	EST_HUMAN	h07c02.s1 NCL_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943588 similar to TR:G434304 G434304
12394	25728		1.55	8.0E-42	AW088062.1	EST_HUMAN	3678P EXPRESSED SEQUENCE TAG MRNA ;
932	13985		1.46	7.0E-42	AL163285.2	NT	xs87a04.x1 NCL_CGAP_Bm36 Homo sapiens cDNA clone IMAGE:2592174 3' similar to contains OFR.12
8814	21781		0.8	7.0E-42	R10963.1	EST_HUMAN	OFR repetitive element ;
9599	22603	36052	1.87	7.0E-42	A1204358.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C085
11508	24450	36000	3.47	7.0E-42	AA599592.1	EST_HUMAN	y38g04.1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:129174 5'
11508	24450	36001	3.47	7.0E-42	AA599592.1	EST_HUMAN	qf59g12.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754278 3'
1873	14898	27895	3.35	6.0E-42	AF012872.1	NT	h23g07.s1 NCL_CGAP_P1 Homo sapiens cDNA clone IMAGE:314652
1873	14898	27896	3.35	6.0E-42	AF012872.1	NT	h23g07.s1 NCL_CGAP_P1 Homo sapiens cDNA clone IMAGE:314652
2297	15309		5.49	6.0E-42	AW238656.1	EST_HUMAN	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
							Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
							xp28f08.x1 NCL_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741789 3' similar to contains L1.11 L1
							repetitive element ;

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5039	18052		1.48	6.0E-42	A0284770.1	EST_HUMAN	q124f09.x1 NCL_CGAP_Br12 Homo sapiens cDNA clone IMAGE:1865761 similar to contains Alu repetitive element
5543	18540	31580	1.8	6.0E-42	AB028690.1	NT	Homo sapiens mRNA for KIAA1087 protein, partial cds
5805	18540	31580	1.37	6.0E-42	AB028690.1	NT	Homo sapiens mRNA for KIAA1087 protein, partial cds
136	13241		5.89	5.0E-42	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
438	13512	26443	1.7	5.0E-42	BE217913.1	EST_HUMAN	h31611.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175052 3'
487	13580		4.85	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
488	13581		1.37	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6844	19887	33181	1.07	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6844	19897	33182	1.07	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6871	20184	33522	2.61	5.0E-42	11417957	NT	Homo sapiens myotubularin related protein 3 (MTMR3), mRNA
7409	20376	33727	1.8	5.0E-42	AF071699.1	NT	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta2 isoform mRNA, complete cds
8110	21047	34447	0.51	5.0E-42	48289377	NT	Homo sapiens reelin (RELN) mRNA
9131	22097	36524	2.98	5.0E-42	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
10970	23890	37403	0.48	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
10970	23890	37404	0.48	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
12087	24959	39555	3.28	5.0E-42	X98411.1	NT	H. sapiens mRNA for myosin-IE
12087	24959	39556	3.28	5.0E-42	X98411.1	NT	H. sapiens mRNA for myosin-IE
754	13815	26758	23.04	4.0E-42	AF055068.1	NT	Homo sapiens MHC class 1 region
754	13815	26759	23.04	4.0E-42	AF055068.1	NT	Homo sapiens MHC class 1 region
1067	14112	27062	2.03	4.0E-42	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4223	17252	30139	1.24	4.0E-42	X59417.1	NT	H. sapiens PROS-27 mRNA
4255	17284	30168	1.12	4.0E-42	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4277	17306	30185	4.28	4.0E-42	4508496	NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4) mRNA
4613	17634	30525	10.89	4.0E-42	4508008	NT	Homo sapiens zinc finger protein 177 (ZNF177) mRNA
5290	18295	31155	1	4.0E-42	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
5290	18295	31158	1	4.0E-42	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
10850	23770	37269	0.54	4.0E-42	AW371201.1	EST_HUMAN	CM0-BT0282-171289-127-603 BT0282 Homo sapiens cDNA
11010	23975	37469	1.88	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-111 ST0278 Homo sapiens cDNA
11010	23976	37500	1.88	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-111 ST0278 Homo sapiens cDNA
11741	24628	38205	2.69	4.0E-42	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1479	14512	27488	4.08	2.0E-42	BF376834.1	EST_HUMAN	RCO-TN0079-110900-024-g07 TN0079 Homo sapiens cDNA
2402	15409	28433	0.93	2.0E-42	AV690218.1	EST_HUMAN	AV690218 GK6 Homo sapiens cDNA clone GKCC8B08 5'
2422	15429	28433	3.65	2.0E-42	AW898344.1	EST_HUMAN	RCS-NIN070-270400-011-110 NIN070 Homo sapiens cDNA
2432	15439	28458	3.27	2.0E-42	AW250069.1	EST_HUMAN	2819283.3prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819283 3'
5950	18940	32124	11.89	2.0E-42	AW955388.1	EST_HUMAN	EST367438 MAGC resequences, MAGC Homo sapiens cDNA
5950	18940	32125	11.89	2.0E-42	AW955388.1	EST_HUMAN	EST367438 MAGC resequences, MAGC Homo sapiens cDNA
6036	19084	32971	0.73	2.0E-42	M29145.1	NT	Human hepatocyte growth factor (hHGF) mRNA, complete cds
6918	18888	33263	0.77	2.0E-42	AJ052583.1	EST_HUMAN	ow83d05.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1653417 3'
10201	23128	36612	1.17	2.0E-42	BE538919.1	EST_HUMAN	601061284F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447620 5'
10415	23337	36822	0.61	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNAse K3)
10415	23337	36822	0.61	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNAse K3)
10974	23894	37408	0.82	2.0E-42	AW834834.1	EST_HUMAN	RCO-L-T0001-150200-032-d11 LT0001 Homo sapiens cDNA
12045	24919	38515	1.48	2.0E-42	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
735	13795	26734	2.47	1.0E-42	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1043	14088	27042	0.78	1.0E-42	AW285809.1	EST_HUMAN	UHH-BI1-aff-e04-0-UJ.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2721871 3'
1103	14147	27097	1.27	1.0E-42	AJ261818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1103	14147	27098	1.27	1.0E-42	AJ261818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1247	15802	27248	12.69	1.0E-42	AF067180.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1247	15802	27248	12.69	1.0E-42	AF067180.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1711	14741	27725	2.08	1.0E-42	11423219	NT	Homo sapiens rec (LOC51201), mRNA
2046	15055	28085	1.05	1.0E-42	AF110298.1	NT	Homo sapiens PDNP1 gene, exon 17
2551	15553	28573	1.89	1.0E-42	5174458	NT	Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA) mRNA
2875	16033	28956	10.93	1.0E-42	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog like (ORCSL) mRNA, and translated products
3721	16784	29675	2.43	1.0E-42	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
3948	16988	29903	1.02	1.0E-42	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4274	17303	30183	1.86	1.0E-42	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4624	17845	30533	0.77	1.0E-42	AW813617.1	EST_HUMAN	RC3-ST0197-161089-012-403 ST0197 Homo sapiens cDNA
4776	17798	30688	2.44	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4776	17798	30689	2.44	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4813	17830	30728	5.31	1.0E-42	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4897	18012	30899	0.79	1.0E-42	Z46120.1	EST_HUMAN	HSCOFF071 normalized infant brain cDNA Homo sapiens cDNA clone c-0807

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10446	23368	38859	4.15	9.0E-43	4757969	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
663	13719	28841	14	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
663	13719	28842	14	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
701	13763	28895	4.8	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
701	13763	28896	4.8	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
701	13763	28897	4.8	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
6783	18875	32057	0.78	8.0E-43	H13852.1	EST_HUMAN	y08e11.1 Soares placenta N62HP Homo sapiens cDNA clone IMAGE:148172 5'
3655	16898	28813	7.28	7.0E-43	AW246442.1	EST_HUMAN	2822251 Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822251 5'
9121	22087		3.41	7.0E-43	A1836748.1	EST_HUMAN	wp69b01.x1 NCI_CGAP_Brn28 Homo sapiens cDNA clone IMAGE:2468985 3' similar to TR:O15475
1347	14382		14.15	8.0E-43	AA491890.1	EST_HUMAN	O15475 UNNAMED HERV-H PROTEIN ; contains LTR7.b1 LTR7 repetitive element ;
2598	15539		2.81	6.0E-43	AV708201.1	EST_HUMAN	ns72d08.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909803 similar to gb:1.05085 60S
6444	19509	32759	2.16	6.0E-43		NT	RIBOSOMAL PROTEIN L30 (HUMAN);
7063	20027	33331	1.91	6.0E-43	AW468897.1	EST_HUMAN	AV708201 ADC Homo sapiens cDNA clone ADCACC10 5'
10210	23135	36822	2.31	6.0E-43	AA185154.1	EST_HUMAN	Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant
11437	24380		2.08	6.0E-43	AL119158.1	EST_HUMAN	MRP38, mRNA
144	13247		1.8	5.0E-43	AL163213.2	NT	h430b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains
503	13575	28496	3.96	5.0E-43	AA382780.1	EST_HUMAN	MER1.S MER1 MER1 repetitive element ;
2859	15919	28840	1.63	5.0E-43	AV732578.1	EST_HUMAN	zr35e08.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:965410 5' similar to TR:G528841
6438	20021	33323	1.15	5.0E-43	A1813508.1	EST_HUMAN	G528841 DB1, COMPLETE CDS, ; contains element PTR7 repetitive element ;
7087	20021	33323	0.65	5.0E-43	A1813508.1	EST_HUMAN	DKFZp761L1712.j1 761 (synonym: hary2) Homo sapiens cDNA clone DKFZp761L1712 5'
8528	21496	34910	0.7	5.0E-43	AA442271.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C013
8628	21496	34911	0.7	5.0E-43	AA442271.1	EST_HUMAN	EST188033 Testis I Homo sapiens cDNA 5' and
9231	22197		0.69	5.0E-43	H74277.1	EST_HUMAN	AV732578 HTF Homo sapiens cDNA clone HTFANC08 5'
9719	22747	36198	4.22	5.0E-43	AA465288.1	EST_HUMAN	W22607.x1 NCI_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2260452 3'
10763	23684	37180	2.38	5.0E-43	A1733244.1	EST_HUMAN	W22607.x1 NCI_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2260452 3'
10802	23723	37225	1.45	5.0E-43	AL049110.1	EST_HUMAN	W22607.x1 NCI_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2260452 3'
11115	24075	37598	4.88	5.0E-43	AW863007.1	EST_HUMAN	zr64e03.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757420 5'
11786	23941	37463	3.46	5.0E-43	X15804.1	NT	zr64e03.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757420 5'
							y449g12.r1 Soares fetal liver spleen TNFLS Homo sapiens cDNA clone IMAGE:228510 5'
							as33408.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:815055 5'
							cc62c10.x5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1589810 3' similar to TR:P905691 P905691
							PV14 GENE ;
							DKFZp434D0119.r1 434 (synonym: hras) Homo sapiens cDNA clone DKFZp434D0119
							MR2-SN0007-290400-004-c02 SN0007 Homo sapiens cDNA
							Human mRNA for alpha-actinin

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
974	15316	26879	3.95	4.0E-43	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5331	18437	31189	1.18	4.0E-43	AI056338.1	EST_HUMAN	0947003.x1 NCL_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:1669013 3'
6505	19569	32821	0.78	4.0E-43	6896009	NT	Homo sapiens glycyl-4RNA synthetase (GARS), mRNA
7337	20308		1.94	4.0E-43	11416793	NT	Homo sapiens protodactherin beta 8 (PCDHB6), mRNA
8518	21488	34900	5.73	4.0E-43	AI244341.1	EST_HUMAN	q178a02.x1 NCL_CGAP_K143 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
8518	21488	34901	5.73	4.0E-43	AI244341.1	EST_HUMAN	MER10 repetitive element;
10678	23800	37085	1.39	4.0E-43	6005987	EST_HUMAN	q178a02.x1 NCL_CGAP_K143 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
12306	25115		6.35	4.0E-43	R20950.1	EST_HUMAN	MER10 repetitive element;
1218	14256		3.85	3.0E-43	AF223391.1	NT	Homo sapiens zinc finger protein 161 (ZNF161), mRNA
1704	14734	27716	1.63	3.0E-43	X97869.1	NT	yg06a05.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31363 5' similar to contains MER10 repetitive element;
3586	16831	29549	1.32	3.0E-43	S68002.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
4319	17348	30232	1.02	3.0E-43	AA548154.1	EST_HUMAN	H. sapiens gene encoding La autoantigen
5003	18017	30904	0.98	3.0E-43	AB037856.1	NT	AML1-EVI-1=AML1-EVI-1 fusion protein (rearranged translocation) [human, leukemic cell line SKH1, mRNA Mutant, 5638 nt]
5424	18527	31405	0.51	3.0E-43	M59259.1	NT	nt55a06.s1 NCL_CGAP_P77 Homo sapiens cDNA clone IMAGE:1017419
5424	18527	31406	0.51	3.0E-43	M59259.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
5993	19080	32277	0.9	3.0E-43	D34613.1	NT	Human carcinoembryonic antigen (CEA) gene, exon 6
6482	19557	32807	1.86	3.0E-43	7305360	NT	Human carcinoembryonic antigen (CEA) gene, exon 6
6492	19557	32808	1.86	3.0E-43	7305360	NT	Human TBXAS1 gene for thrombosane synthase, promoter region and exon 1
6890	19942	33238	4.38	3.0E-43	U65487.1	NT	Mus musculus otogelin (Otog), mRNA
8503	21471		8.89	3.0E-43	AA458824.1	EST_HUMAN	Mus musculus otogelin (Otog), mRNA
9172	22138	35564	1.82	3.0E-43	7661721	NT	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds
10223	23148	36837	0.6	3.0E-43	11420217	NT	aa88f11.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR12 THR repetitive element;
185	13285		9.29	2.0E-43	AI190764.1	EST_HUMAN	Homo sapiens hypothetical protein (HSA011916), mRNA
6620	19678	32955	0.95	2.0E-43	BE222778.1	EST_HUMAN	Homo sapiens similar to ornithine carbamoyltransferase (H. sapiens) (LOC83848), mRNA
							q461c09.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1733988 3' similar to contains PTR7.13
							PTR7 PTR7 repetitive element;
							hu53a08.x1 NCL_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
							MER40 repetitive element;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6620	10678	32058	0.95	2.0E-43	BE222778.1	EST_HUMAN	h1u53a08.x1 NCI_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
7491	20456	33814	1.07	2.0E-43	AW207390.1	EST_HUMAN	MER40 repetitive element;
8651	21619		9.34	2.0E-43	UA3701.1	NT	UIH1B11-ef-e-09-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721712 3'
11532	24473		2.98	2.0E-43	T03007.1	EST_HUMAN	Human ribosomal protein L23a mRNA, complete cds
1657	14689	27684	4.13	1.0E-43	AF154838.1	NT	FB1G5 Fetal brain, Stratiogene Homo sapiens cDNA clone FB1G5 3'end similar to LINE-1
1657	14689	27685	4.13	1.0E-43	AF154838.1	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
1717	14747	27733	2.13	1.0E-43	AL163284.2	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
2734	15728	28742	5.67	1.0E-43	BF348283.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
5484	18384	31496	0.77	1.0E-43	4885544	NT	602022319F1 NCI_CGAP_Bm57 Homo sapiens cDNA clone IMAGE:4157666 5'
6764	18618	33098	6.3	1.0E-43	4607168	NT	Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 3 (PDK3) mRNA
6764	18618	33099	6.3	1.0E-43	4607168	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
7159	18391	31235	1.67	1.0E-43	R19781.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4) mRNA
8264	21233	34644	0.97	1.0E-43	AF175265.1	NT	y040e01.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34732 5' similar to
8401	21370		3.15	1.0E-43	AF198490.1	NT	SP-BD38_MOUSE P28658 BRAIN PROTEIN DN38 ;
9189	22155	35584	30.83	1.0E-43	AW963676.1	EST_HUMAN	Homo sapiens vacuolar sorting protein 35 (VPS35) mRNA, complete cds
10654	23578	37073	0.62	1.0E-43	AW963228.1	EST_HUMAN	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
11311	24261	37787	5.9	1.0E-43	AB94961.1	EST_HUMAN	EST375749 IMAGE resequences, MAGH Homo sapiens cDNA
11693	24658	38238	3.35	1.0E-43	11424378	NT	EST3765289 IMAGE resequences, MAGB Homo sapiens cDNA
12244	25074		2.8	1.0E-43	AL137984.1	EST_HUMAN	wr87h01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494705 3'
12542	25285	31808	2.24	1.0E-43	AB175416.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA
12745	25394	31757	2.8	9.0E-44	11418322	NT	DKFZp761D1015.1 781 (synonym: hary2) Homo sapiens cDNA clone DKFZp761D1015 5'
891	13946	26904	7.09	8.0E-44	AI222895.1	EST_HUMAN	wf68b04.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2313775 3'
891	13946	26905	7.09	8.0E-44	AI222895.1	EST_HUMAN	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
8884	21850	35271	2.88	8.0E-44	X04354.1	NT	q123g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
10702	23624	37120	0.47	8.0E-44	11423497	NT	q123g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
10702	23624	37121	0.47	8.0E-44	11423497	NT	H. sapiens DNA for Cone cGMP-PDE gene
11469	24442	37893	3.93	8.0E-44	Y10498.2	NT	Homo sapiens small proline-rich protein 2C (SPRR2C), mRNA
11995	24872	38469	2.24	8.0E-44	L29139.1	NT	Homo sapiens small proline-rich protein 2C (SPRR2C), mRNA
12495	25237	31801	2.85	8.0E-44	11527389	NT	Homo sapiens mRNA for thymidine kinase, partial
12536	25577	31698	1.53	8.0E-44	11418086	NT	Homo sapiens myosin mRNA, partial cds
12870	25755	31516	2.68	8.0E-44	11418069	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA
13029	25577	31688	1.58	8.0E-44	11418086	NT	Homo sapiens putative nuclear protein (HRIHFB2122), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
660	13726		0.87	7.0E-44	R06035.1	EST_HUMAN	ye89d01.r1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:124820 5'
2243	15257	26283	0.95	7.0E-44	5031886	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP) mRNA
2877	16035	28957	2.68	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2877	16035	28958	2.68	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2877	16035	28959	2.68	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
3876	16915	28824	2.55	7.0E-44	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4270	17286	30177	1.07	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4270	17289	30178	1.07	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
5168	18177	31055	1.04	7.0E-44	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
8528	21484	34908	5.87	7.0E-44	AU159839.1	EST_HUMAN	AU159839 Y79AA1 Homo sapiens cDNA clone Y79AA1000498 3'
6223	19287	32531	0.55	6.0E-44	Z20946.1	EST_HUMAN	HSAADDEYU P, Human foetal Brain Whole tissue Homo sapiens cDNA
12070	24943	38536	1.83	6.0E-44	AW954050.1	EST_HUMAN	EST368120 MAGE resequences, MAGEC Homo sapiens cDNA
303	13397		3.9	5.0E-44	AJ288880.1	NT	Homo sapiens KIAA0861 gene (partial), X13 gene and LZTFL1 gene
332	13421		2.88	5.0E-44	AJ288880.1	NT	Homo sapiens KIAA0861 gene (partial), X13 gene and LZTFL1 gene
8220	21189	34598	3.85	5.0E-44	AJ588523.1	EST_HUMAN	tr4002.x1 NCI_OGAP_Bm25 Homo sapiens cDNA clone IMAGE:2170083 3' similar to contains OFF.11
9739	22767		2.65	5.0E-44	AU124571.1	EST_HUMAN	OFR OFR repetitive element
3425	16473	28382	3.2	4.0E-44	AL163303.2	NT	AU124571 NT2RM4 Homo sapiens cDNA clone NT2RM4000218 5'
6050	18062		1.02	4.0E-44	AI435225.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
7711	20668	34035	0.66	4.0E-44	BE883178.1	EST_HUMAN	tr11d02.x1 NCI_OGAP_Pan1 Homo sapiens cDNA clone IMAGE:2130147 3'
8814	21582	34998	0.64	4.0E-44	L21948.1	NT	601508601F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3810152 5'
9230	22196		0.49	4.0E-44	BE176618.1	EST_HUMAN	Human fibrillin (FBN1) locus polymorphism
11669	24508	38065	8.23	4.0E-44	U80878.1	NT	RC3-HT0585-010400-023-d08 HT0585 Homo sapiens cDNA
1801	14829		0.95	3.0E-44	6812477	NT	Homo sapiens carboxyl terminal LIM domain protein (GLIM1) mRNA, complete cds
2637	15639	28562	0.95	3.0E-44	BE880828.1	EST_HUMAN	Homo sapiens karyopherin alpha 6 (Importin alpha 7) (KPNAB6) mRNA
3114	16171	29081	6.12	3.0E-44	AA168851.1	EST_HUMAN	601491520F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3883839 5'
3905	16945	28958	1.71	3.0E-44	AA337234.1	EST_HUMAN	zp18b05.r1 Stratagene fetal retina 837202 Homo sapiens cDNA clone IMAGE:609777 5'
8074	21011	34410	0.55	3.0E-44	BE884820.1	EST_HUMAN	EST42299 Endometrial tumor Homo sapiens cDNA 5' end similar to similar to alpha-1-antitrypsinase F
9877	22830	36284	0.68	3.0E-44	AF005273.1	NT	601510547F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912010 5'
1051	14097	27047	1.04	2.0E-44	4828685	NT	Sus scrofa domestica submandibular apomucin mRNA, complete cds
1051	14097	27048	1.04	2.0E-44	4828685	NT	Homo sapiens DEADH (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1212	14250	27208	2.62	2.0E-44	5803200	NT	Homo sapiens DEADH (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1212	14250	27209	2.52	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1315	14350	27318	5.49	2.0E-44	AF133586.1	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1370	14404	27374	1.05	2.0E-44	BE468325.1	EST_HUMAN	hw14g06.x1 NCL_CGAP_LU24 Homo sapiens cDNA clone IMAGE:3182338 3' similar to SW:OXYB_HUMAN
2161	15177	28108	2.57	2.0E-44	AF070651.1	NT	P22059 OXYSTEROL-BINDING PROTEIN ;
2818	15616		2.01	2.0E-44	5901833	NT	Homo sapiens tissue-type bone marrow zinc finger protein 4 mRNA, complete cds
3484	16830	28455	1.18	2.0E-44	D87675.1	NT	Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (CLAPS4), mRNA
4600	17621	30514	1.8	2.0E-44	AW864379.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
6214	18288	32521	1.59	2.0E-44	11446901	NT	PM4-SN0016-120500-003-a04 SN0016 Homo sapiens cDNA
							Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), mRNA
7037	18369	31258	1.73	2.0E-44	AF038688.1	NT	Homo sapiens general transcription factor 24 (GTF22) mRNA, alternatively spliced product, complete cds
7646	20605	33970	3.8	2.0E-44	11419226	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
7845	20605	33971	3.8	2.0E-44	11419228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
8771	21738	35158	0.72	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8771	21738	35159	0.72	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8968	21932	35357	1.83	2.0E-44	BE388068.1	EST_HUMAN	801286914F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3619588 5'
							TGBAP1E2785 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens
12152	25010		1.44	2.0E-44	BE244802.1	EST_HUMAN	cDNA clone TCBAP2795
12895	25898		1.32	2.0E-44	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
13047	25987		1.68	2.0E-44	11626283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
54	13174	26084	7.76	1.0E-44	7667334	NT	Homo sapiens Misschaperone/NIK-related kinase (MINK), mRNA
54	13174	26085	7.76	1.0E-44	7667334	NT	Homo sapiens Misschaperone/NIK-related kinase (MINK), mRNA
582	13650	26664	1.85	1.0E-44	AW853182.1	EST_HUMAN	RC1-CT0249-030300-028-h12 CT0249 Homo sapiens cDNA
1202	14241		1.85	1.0E-44	AW894803.1	EST_HUMAN	RC1-BN0039-110300-012-501 BN0039 Homo sapiens cDNA
1577	14810		7.03	1.0E-44	AL183303.2	NT	Homo sapiens chromosome 21 segment HS21C103
							z663d02.L1 Soares_total_fetus_Nb24-IF9_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to
2233	15247	28270	4.49	1.0E-44	AA434554.1	EST_HUMAN	contains THR.13 THR repetitive element ;
2233	15247	28271	4.49	1.0E-44	AA434554.1	EST_HUMAN	contains THR.13 THR repetitive element ;
2280	15889	28327	0.95	1.0E-44	AA398098.1	EST_HUMAN	z68g11.L1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728478 5'
							Homo sapiens transcription factor IG-HM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel a2
2770	15762	28783	2.5	1.0E-44	AF196779.1	NT	aa01c08.e1 Soares_NihHMPu_S1 Homo sapiens cDNA clone IMAGE:311884 3'
3738	16780		3.01	1.0E-44	AA455869.1	EST_HUMAN	Homo sapiens alpha satellite DNA, M1 monomer type
5155	18165	31043	0.64	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type
5155	18165	31044	0.64	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type

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8608	21578	34991	1.17	1.0E-44	AW867073.1	EST_HUMAN	EST378147 MAGE resequenced, MAGJ Homo sapiens cDNA
8608	21578	34992	1.17	1.0E-44	AW867073.1	EST_HUMAN	EST378147 MAGE resequenced, MAGJ Homo sapiens cDNA
8603	21859	35385	1.23	1.0E-44	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8381	22346	35778	0.59	1.0E-44	AI337183.1	EST_HUMAN	q68g07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2009628 3'
11354	24304		12.74	1.0E-44	AV714608.1	EST_HUMAN	AV714608 DCB Homo sapiens cDNA clone DCBBYE03 5'
11858	24740	38325	3.23	1.0E-44	10062864	NT	Homo sapiens Sush1 domain (SCR repeat) containing (BK60A6.2), mRNA
11817	24798	38388	2.7	1.0E-44	AW846987.1	EST_HUMAN	RC1-CT0198-150989-011-C08 CT0198 Homo sapiens cDNA
11817	24798	38389	2.7	1.0E-44	AW846987.1	EST_HUMAN	RC1-CT0198-150989-011-C08 CT0198 Homo sapiens cDNA
4609	17630	30522	1.16	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10378 (FLJ10378), mRNA
4609	17630	30523	1.16	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10378 (FLJ10378), mRNA
6806	19860	33147	1.52	9.0E-45	AB023212.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
2629	16532	28653	1.57	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
5119	18129	31005	0.68	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
8444	21413	34827	0.85	8.0E-45	AA377985.1	EST_HUMAN	EST190893 Synovial sarcoma Homo sapiens cDNA 5' end
2669	16027		0.96	7.0E-45	AL160131.1	NT	Novel human gene mapping to chromosome 22
1556	14588		1	8.0E-45	AI675425.1	EST_HUMAN	w696c08.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:2313802 3' similar to contains L1.11 L1 repetitive element;
4003	17042		3.48	8.0E-45	AW157570.1	EST_HUMAN	al63h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782909 3' similar to SW:R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A ;
12836	25948		1.53	6.0E-45	11418219	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
893	13948		1.56	5.0E-45	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
2018	15039	28050	4.89	5.0E-45	BF333827.1	EST_HUMAN	GM4-CN0044-180200-515-901 CN0044 Homo sapiens cDNA
3223	16278	29203	1.49	5.0E-45	AI523788.1	EST_HUMAN	tg94f07.x1 NCI_CGAP_QLL1 Homo sapiens cDNA clone IMAGE:2116453 3' similar to SW:PAX1_MOUSE P09084 PAIRED BOX PROTEIN PAX-1.;
5590	18986	31654	8.41	5.0E-45	AA397781.1	EST_HUMAN	z172403.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727877 3' similar to contains element TAR1 repetitive element;
6135	19212	32439	1.48	5.0E-45	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
6135	19212	32440	1.48	5.0E-45	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
6183	19258	32491	0.84	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6183	19258	32492	0.84	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6313	19384	32625	1.07	5.0E-45	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6313	19384	32626	1.07	5.0E-45	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
8619	21587	35003	0.66	5.0E-45	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
9396	22561	35792	1.29	5.0E-45	4759223	NT	Homo sapiens programmed cell death 5 (PDCD5), mRNA

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12003	24880	38476	2.3	5.0E-45	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
1146	14188	27139	10.78	4.0E-45	X85826.1	NT	H. sapiens ART4 gene
2289	15311	28331	1.91	4.0E-45	BE266822.1	EST_HUMAN	601194440F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538425 5'
4835	17553	30446	0.72	4.0E-45	4756249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
8908	22273		0.89	4.0E-45	AA226220.1	EST_HUMAN	nc26a07.s1 NC1_CGAP_P11 Homo sapiens cDNA clone IMAGE:1008294 similar to contains element L1 repetitive element:
12167	25894	31418	1.4	4.0E-45	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
4115	16393		0.99	3.0E-45	T71480.1	EST_HUMAN	yc36f07.r1 Scores: fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:110245 5'
6364	19433	32676	1.13	3.0E-45	6763651	NT	Mus musculus dynactin, exon, heavy chain 11 (Dnahtc11), mRNA
6364	19433	32677	1.13	3.0E-45	6763651	NT	Mus musculus dynactin, exon, heavy chain 11 (Dnahtc11), mRNA
8794	21761		1.53	3.0E-45	AV723976.1	EST_HUMAN	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
9143	22109	35535	3.82	3.0E-45	4769451	NT	Homo sapiens golgi autoantigen, golgin subfamily a, 2 (GOLGA2) mRNA
10670	23582	37087	10.98	3.0E-45	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
10670	23582	37088	10.98	3.0E-45	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
12654	25888		4.13	3.0E-45	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2511	15514		1.06	2.0E-45	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
3045	16102	28016	1.8	2.0E-45	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
6671	19728	33004	5.17	2.0E-45	L01685.1	NT	Human eosinophil Charcot-Leyden crystal (CLC) protein (lysophospholipase) gene, promoter and exon 1
7888	20812	34189	1.25	2.0E-45	BE782184.1	EST_HUMAN	601467793F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870898 5'
8768	21726	35148	1.08	2.0E-45	AW834834.1	EST_HUMAN	RCO-LT0001-150200-032-d11 LT0001 Homo sapiens cDNA
11154	25704	37639	25.96	2.0E-45	BE834350.1	EST_HUMAN	MRO-HT0923-190800-201-a02 HT0923 Homo sapiens cDNA
							sa87f12.r1 Stratiene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838316 5' similar to
11511	24462	38002	3.5	2.0E-45	AA458770.1	EST_HUMAN	TR-G1144589 G1144689 R-SLY1.;
11832	24715	38298	1.67	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NC1_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745868 3'
11832	24715	38300	1.67	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NC1_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745868 3'
12989	25555		3.46	2.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
124	13482		1.84	1.0E-45	BE389855.1	EST_HUMAN	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
408	13482		2.09	1.0E-45	BE389855.1	EST_HUMAN	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
473	13545	28474	1.93	1.0E-45	4508412	NT	Homo sapiens RAP1A, member of RAS oncogene family (RAP1A), mRNA
1178	14219	27175	1.94	1.0E-45	76157280	NT	Homo sapiens Langerhans cell specific alpha-type lectin (LANGERIN), mRNA
3120	16177	29088	7.12	1.0E-45	U32168.1	NT	Human pro-alpha2 chain of collagen type XI (COL11A2) gene, complete cds
3503	16550	29477	0.84	1.0E-45	8858558	NT	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
4503	17528	30413	4.08	1.0E-45	BE396633.1	EST_HUMAN	601289116F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619803 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4767	17777		1.01	1.0E-45	H57443.1	EST_HUMAN	y05002.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:204363 5'
8365	21334	34745	0.57	1.0E-45	11422238	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
8365	21334	34746	0.57	1.0E-45	11422238	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
8954	21920	36348	0.85	1.0E-45	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9476	22440	36880	4.82	1.0E-45	BE887843.1	EST_HUMAN	601511228F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912535 5'
9880	22833	36287	1.03	1.0E-45	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
12369	25155	31858	9.31	1.0E-45	11418099	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
12551	25274		9.31	1.0E-45	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12556	25277		6.48	1.0E-45	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12862	25832	31715	3.98	1.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
8570	21638	34958	1.68	9.0E-46	9910283	NT	Mus musculus keratin complex 2, gene 8g (Krt2-8g), mRNA
8981	21947		7.02	9.0E-46	AL183209.2	NT	Homo sapiens chromosome 21 segment HS21C009
10845	23765	37264	9.09	9.0E-46	AW246864.1	EST_HUMAN	2822446.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822446 5'
2448	15453	28474	11.23	8.0E-46	AI433261.1	EST_HUMAN	163208.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132188 3' similar to gb:J00314_m82
2448	15453	28475	11.23	8.0E-46	AI433261.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
8389	21358		6.79	8.0E-46	BE187244.1	EST_HUMAN	183208.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132188 3' similar to gb:J00314_m82
2248	15282	28289	1.17	7.0E-46	U46007.1	NT	TUBULIN BETA-1 CHAIN (HUMAN);
4611	17832		3.58	7.0E-46	BE386165.1	EST_HUMAN	RC5-HT0508-280200-012-C12 HTD508 Homo sapiens cDNA
4945	17882		1.14	7.0E-46	BE064386.1	EST_HUMAN	Rattus norvegicus espin mRNA, complete cds
6160	19235	32488	3.92	7.0E-46	8922708	NT	601277292F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618119 5'
6842	19700	32678	1.95	7.0E-46	BF105845.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
2765	15757	28778	5.63	6.0E-46	AI884381.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA
2765	15757	28779	5.63	6.0E-46	AI884381.1	EST_HUMAN	601822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042738 5'
6252	19325	32556	10.15	6.0E-46	AI884448.1	EST_HUMAN	601822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042738 5'
7426	20393	33743	0.76	6.0E-46	AW513244.1	EST_HUMAN	WMS1108.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
7609	20570	33933	0.51	6.0E-46	BF509740.1	EST_HUMAN	MER19 repetitive element;
205	13306		6.47	5.0E-46	AL163210.2	NT	WMS1108.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
3639	16556	28508	1.01	5.0E-46	BE677104.1	EST_HUMAN	WMS1108.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3539	16885	29509	1.01	5.0E-46	BE577194.1	EST_HUMAN	7d81g01.x1 Lupskl_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
6899	18951	33248	1.84	5.0E-46	BF590442.1	EST_HUMAN	ncs3807.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3258757 3' similar to TR:O75202
7128	20104	33415	3.97	5.0E-46	BF347229.1	EST_HUMAN	O75202 HOMOLOG OF RAT KIDNEY-SPECIFIC;
7302	20273	33609	0.67	5.0E-46	AW582263.1	EST_HUMAN	60202104F1 NCL CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
7614	20574	33838	0.56	5.0E-46	BE549744.1	EST_HUMAN	QV4-ST0212-120100-075-009 ST0212 Homo sapiens cDNA
							7b38b05.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3230481 3'
842	13708		2.88	4.0E-46	AA601143.1	EST_HUMAN	nc54e09.s1 NCL CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:U53741_ma1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
1715	14745	27729	7.91	4.0E-46	AW770544.1	EST_HUMAN	h186c03.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1 LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element;
1716	14745	27730	7.91	4.0E-46	AW770544.1	EST_HUMAN	h186c03.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1 LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element;
2749	15742	28759	3.28	4.0E-46	M18048.1	NT	Human endogenous retrovirus RTVL-H2
4447	17473	30361	0.95	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
4447	17473	30362	0.95	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
5194	18203	31076	0.78	4.0E-46	BE044260.1	EST_HUMAN	ho-42a07.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040020 3'
5194	18203	31077	0.78	4.0E-46	BE044260.1	EST_HUMAN	ho-42a07.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040020 3'
6511	18611	31542	2.11	4.0E-46	M38852.1	NT	Human Ig gamma3 heavy-chain gene V region, partial cds
5511	18611	31543	2.11	4.0E-46	M38852.1	NT	Human Ig gamma3 heavy-chain gene V region, partial cds
12782	25422	31737	2.51	4.0E-46	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4421	17448	30339	1.21	3.0E-46	4506376	NT	Homo sapiens mitogen-activated protein kinase kinase 3 (MAP4K3), mRNA
4809	17828	30722	2.84	3.0E-46	Z73860.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda
4809	17828	30723	2.84	3.0E-46	Z73860.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda
9102	22068	35494	10	3.0E-46	A1831462.1	EST_HUMAN	wf48c04.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
9358	22323	35750	0.59	3.0E-46	L08850.1	NT	Human AD amyloid mRNA, complete cds
9358	22323	35751	0.59	3.0E-46	L08850.1	NT	Human AD amyloid mRNA, complete cds
11898	24779	38365	2.01	3.0E-46	D31765.1	NT	Human mRNA for KIAA0061 gene, partial cds
838	13895	28850	10.84	2.0E-46	AA468646.1	EST_HUMAN	nc06a09.s1 NCL CGAP_Cc3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR repetitive element;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1584	14597		2.13	2.0E-46	AA878246.1	EST_HUMAN	z127a11.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:431988 3'
1647	14679	27652	4.43	2.0E-46	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
5010	18024	30910	1.06	2.0E-46	AA393286.1	EST_HUMAN	z159a02.l1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728660 5' similar to SW:RSP1_MOUSE
7726	20682	34046	7.69	2.0E-46		NT	
8404	21373		1.18	2.0E-46	BE889181.1	EST_HUMAN	Q01730 RSP-1 PROTEIN ;
11576	24514		1.82	2.0E-46	7857233	NT	Mus musculus sperm tail associated protein (Stap), mRNA
12657	25741	31619	3.22	2.0E-46	AW277214.1	EST_HUMAN	601445137F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3846287 5'
1237	14273	27233	0.66	1.0E-46	4502694	NT	Homo sapiens small acidic protein (IMAGE145052), mRNA
2289	15302	28328	3.26	1.0E-46	AW978516.1	EST_HUMAN	qx78h03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2759789 3'
2409	15416	28440	2.9	1.0E-46	H97330.1	EST_HUMAN	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
3262	16316	28238	1.32	1.0E-46	AA631912.1	EST_HUMAN	EST390625 MAGE resequences, MAGP Homo sapiens cDNA
4908	17925		2.93	1.0E-46	AB023107.1	NT	EST498095 WATM1 Homo sapiens cDNA clone 48b095
5764	18876	32058	7.06	1.0E-46	BF194707.1	EST_HUMAN	np78b02.e1 NCI_CGAP_P12 Homo sapiens cDNA clone IMAGE:1132365 similar to gbclX76717 H.sapiens
6089	25663	32382	5.57	1.0E-46	8923762	NT	MT-11 mRNA. (HUMAN);
6089	25663	32383	5.57	1.0E-46	8923762	NT	Homo sapiens mRNA for KIAA0980 protein, partial cds
6768	19820	33102	0.65	1.0E-46	BF168247.1	EST_HUMAN	7c92b01.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
11211	18876	32058	3.61	1.0E-46	BF194707.1	EST_HUMAN	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
12322	25124	31845	1.62	1.0E-46	BF531102.1	EST_HUMAN	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
12322	25124	31846	1.62	1.0E-46	BF531102.1	EST_HUMAN	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
13068	25600		4.54	1.0E-46	AV716377.1	EST_HUMAN	7n48e07.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567852 3' similar to contains element
767	13826		3.24	9.0E-47	AJ271755.1	NT	MER22 repetitive element ;
4968	17983	30873	3.91	9.0E-47	AW770928.1	EST_HUMAN	7c92b01.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
6513	19577	32632	1.66	9.0E-47	11425439	NT	602072284F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4215388 5'
12616	26843	31432	2.25	9.0E-47	11417968	NT	602072284F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4215388 5'
1825	14852	27846	47.72	8.0E-47	Y18536.1	NT	AV716377 DCB Homo sapiens cDNA clone DCBAIE03 5'
1825	14852	27847	47.72	8.0E-47	Y18536.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
						NT	h183e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3009634 3' similar to TR:O15703 O15703
						EST_HUMAN	HYPOTHETICAL 12.4 KD PROTEIN ;
						NT	Homo sapiens zinc finger protein ZNF286 (ZNF286), mRNA
						NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
						NT	Homo sapiens HLA-C gene, exon 5, individual 18323
						NT	Homo sapiens HLA-C gene, exon 5, individual 18323
2728	15722	28739	1.77	8.0E-47	5453955	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PPP2R5E) mRNA
3036	16094	29012	2.12	8.0E-47	AJ228043.1	NT	Homo sapiens 859 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3640	16883	29588	0.78	8.0E-47	AB041928.1	NT	Homo sapiens mRNA for GCK family kinase MINIK-2, complete cds
3640	16883	29588	0.78	8.0E-47	AB041928.1	NT	Homo sapiens mRNA for GCK family kinase MINIK-2, complete cds
5254	18262	31131	0.65	8.0E-47	7662421	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
2555	15557	28575	2.2	6.0E-47	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
6040	22008	35427	0.49	6.0E-47	U77054.1	EST_HUMAN	HSUJ77054 Human Homo sapiens cDNA clone NT
8631	22575	36025	6.5	6.0E-47	AI695189.1	EST_HUMAN	U98H02.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2298859 3'
10070	22887	36465	0.88	6.0E-47	AB042824.1	NT	Homo sapiens RECQL5 beta mRNA for DNA helicase recQ5 beta, complete cds
10070	22887	36465	0.88	6.0E-47	AB042824.1	NT	Homo sapiens RECQL5 beta mRNA for DNA helicase recQ5 beta, complete cds
6729	19785	33064	6.56	5.0E-47	AB042824.1	NT	Homo sapiens CDC37 (cell division cycle 37, S. cerevisiae, homolog) (CDC37), mRNA
11147	24107		4.6	5.0E-47	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stratiogene (cat#836206) Homo sapiens cDNA clone HFB07
1400	14433	27403	4.48	4.0E-47	4557558	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
7008	20132	33447	0.98	4.0E-47	BE888988.1	EST_HUMAN	MR4-TN0108-280800-201-d04 TN0108 Homo sapiens cDNA
8825	21792	35214	2.45	4.0E-47	BE016483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8825	21792	35215	2.45	4.0E-47	BE016483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8965	21831	35358	0.81	4.0E-47	AW983777.1	EST_HUMAN	RC3-BN0034-220300-015-405 BN0034 Homo sapiens cDNA
11854	24833		5.51	4.0E-47	AW515508.1	EST_HUMAN	xx88-07.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2848597 3' similar to SW:INTB_MOUSE
546	13617	29538	1.73	3.0E-47	BE907834.1	EST_HUMAN	Q84252 VIRAL INTEGRATION SITE PROTEIN INT-8, [1];
546	13617	29539	1.73	3.0E-47	BE907834.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889721 5'
819	13677	29826	6.7	3.0E-47	N57483.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889721 5'
944	13887	28849	7.86	3.0E-47	AL163284.2	NT	y54504.s1 Soares multiple sclerosis 2Nbr-IMPSP Homo sapiens cDNA clone IMAGE:277327 3'
3315	16368	29288	0.7	3.0E-47	4504116	NT	Homo sapiens chromosome 21 segment HS21C084
3980	17030		6.21	3.0E-47	U93181.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4389	17417	30301	0.98	3.0E-47	M12859.1	NT	Homo sapiens nuclear dual-specificity phosphatase (SDF-1) mRNA, partial cds
6128	19208	32429	4.76	3.0E-47	AW408800.1	EST_HUMAN	Human T-cell receptor active alpha-chain mRNA from JM cell line, complete cds
6128	19208	32430	4.76	3.0E-47	AW408800.1	EST_HUMAN	U1-HF-BMO-adv-d-07-0-UJ.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 6'
6716	19772		1.72	3.0E-47	AI222413.1	EST_HUMAN	U1-HF-BMO-adv-d-07-0-UJ.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
7608	20588	33831	0.59	3.0E-47	AI819755.1	EST_HUMAN	q04607.x1 Soares NFI_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1943716 3'
7608	20589	33832	0.59	3.0E-47	AI819755.1	EST_HUMAN	w11h08.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
9185	22151	35579	0.59	3.0E-47	AW963796.1	EST_HUMAN	w11h08.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
9185	22151	35580	0.59	3.0E-47	AW963796.1	EST_HUMAN	EST375869 MAGI resequences, MAGI Homo sapiens cDNA
149	13252	28181	1.57	2.0E-47	4505318	NT	EST375869 MAGI resequences, MAGI Homo sapiens cDNA
969	14021	28973	2.24	2.0E-47	AL163209.2	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
969	14021	28974	2.24	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1570	14603		1.08	2.0E-47	A1968279.1	EST_HUMAN	wf9b02.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2478851 3'
1597	14620	27604	2.2	2.0E-47	7682109	NT	Homo sapiens KIAA0428 gene product (KIAA0428), mRNA
1687	14718	27698	3.87	2.0E-47	AA524514.1	EST_HUMAN	ng43h12.s1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:937607 3'
4374	17402	30282	1.82	2.0E-47	4504868	NT	Homo sapiens ring finger protein (C3HC4 type) 8 (RNF8), mRNA
4411	17439	30327	1.48	2.0E-47	AA569582.1	EST_HUMAN	nt23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652
4411	17439	30328	1.48	2.0E-47	AA569582.1	EST_HUMAN	nt23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652
4534	17557	30445	1.68	2.0E-47	5174648	NT	Homo sapiens Rev/Rex activation domain binding protein-related (RAB-R) mRNA
4850	17867	30760	1.22	2.0E-47	AW985168.1	EST_HUMAN	EST377239 MAGE resequences, MAGI Homo sapiens cDNA
5187	18198		0.7	2.0E-47	A041128.1	EST_HUMAN	oa61h03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1641845 3'
5880	18989	32160	1.22	2.0E-47	AF073921.1	NT	Homo sapiens regulator of G-protein signaling 6 variant form (RGS6) mRNA, complete cds
6088	19168	32380	1.29	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
6088	19168	32381	1.29	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
7984	25682		1.43	2.0E-47	L08731.1	NT	Homo sapiens 5-hydroxytryptamine 1D receptor pseudogene with an Alu repeat insertion
8297	21268	34677	1.76	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8297	21268	34678	1.76	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9068	22034	35457	1.75	2.0E-47	AF071771.1	NT	Homo sapiens SPH-binding factor mRNA, partial cds
9845	22781	36235	0.78	2.0E-47	11528136	NT	Homo sapiens BTG family, member 3 (BTG3), mRNA
11800	23955	37478	2.31	2.0E-47	M76125.1	NT	Human tyrosine kinase receptor (ex4) mRNA, complete cds
12358	25888	31415	2.12	2.0E-47	R42423.1	EST_HUMAN	yf82a08.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:28866 3' similar to contains OFR repetitive element;
1404	14437	27405	6.91	1.0E-47	A333429.1	EST_HUMAN	qp59h03.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1831189 3'
3835	16875	29776	1.18	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
3835	16875	29777	1.18	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
6112	18122	30997	2.55	1.0E-47	AW813908.1	EST_HUMAN	RCS-ST0187-130400-017-h02 ST0197 Homo sapiens cDNA
7244	18979	33278	6.6	1.0E-47	A880888.1	EST_HUMAN	at19a08.x1 Barcode aorta HPLRB8 Homo sapiens cDNA clone IMAGE:2355586 3' similar to gb:M22995
9220	22186		0.77	1.0E-47	AW684848.1	EST_HUMAN	RAS-RELATED PROTEIN RAP-1A (HUMAN);
10721	23843	37136	2.41	1.0E-47	L30115.1	NT	h84411.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2878972 3' similar to gb:M28328 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1618	14648	27623	3.85	9.0E-48	AF223391.1	NT	Papio hamadryas alcohol dehydrogenase class I (ADH) gene, 5' region
3569	16614	29536	0.7	9.0E-48	BF359947.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
5763	18855	32035	0.84	9.0E-48	BE888196.1	EST_HUMAN	CM2-MT0100-310700-280-R05 MT0100 Homo sapiens cDNA
5763	18855	32036	0.84	9.0E-48	BE888196.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913108 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6220	19284	32528	0.8	9.0E-48	AB83168.1	EST_HUMAN	at75f09.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377889 3' similar to TR:O60844
6351	19420	32661	0.73	9.0E-48	AU123240.1	EST_HUMAN	O60844 HOMOLOG OF RAT ZMOGEN GRANULE MEMBRANE PROTEIN. ;
11452	24395	37940	2.49	9.0E-48	BE363813.1	EST_HUMAN	AU123240 NT2RM1 Homo sapiens cDNA clone NT2RM1000878 5'
1255	14291		1.5	8.0E-48	4501900	NT	601310478F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632083 5'
1256	14291		1.54	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1), mRNA
							Homo sapiens aminocyclase 1 (ACY1), mRNA
3152	16209	29123	3.31	8.0E-48	AW768477.1	EST_HUMAN	h161b03.x1 NCL_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
3152	16209	29124	3.31	8.0E-48	AW768477.1	EST_HUMAN	BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
491	13664		1.54	7.0E-48	AB033035.1	NT	h161b03.x1 NCL_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
492	13564		22.81	7.0E-48	AB033035.1	NT	BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
1498	14529	27501	1.04	7.0E-48	6912719	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
1643	14675	27648	4.5	7.0E-48	5730038	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
6707	19763	93042	24.74	7.0E-48	11416931	NT	Homo sapiens taurine-like kinase 1 (TLK1), mRNA
3612	16657	29575	1.2	6.0E-48	A1761111.1	EST_HUMAN	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6176	19251	32484	1.12	6.0E-48	AB006955.1	NT	Homo sapiens histidyl-tRNA synthetase (HARS), mRNA
6953	20177	93502	0.89	6.0E-48	11420985	NT	w68b03.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2386613 3'
7702	25687	34022	0.56	6.0E-48	AB046844.1	NT	Homo sapiens mRNA for AIE-75, complete cds
7702	25687	34023	0.56	6.0E-48	AB046844.1	NT	Homo sapiens BMX non-receptor tyrosine kinase (BMX), mRNA
9479	22443	35885	1.94	6.0E-48	AF029816.1	NT	Homo sapiens mRNA for KIAA1624 protein, partial cds
9896	22852	30311	1.78	6.0E-48	11427428	NT	Homo sapiens putative oncogene protein mRNA, partial cds
10047	22874	36441	3.3	6.0E-48	AA186080.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA
3320	18313	29292	1.58	5.0E-48	4828891	NT	zq45b08.x1 Striatogene hNT neuron (#637233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element;
8921	21887	33314	1.11	5.0E-48	BE064410.1	EST_HUMAN	Homo sapiens phosphodiesterase 1A, calmodulin-dependent (PDE1A) mRNA
11305	24255	37782	2.83	4.0E-48	AB020420.1	EST_HUMAN	RC4-BT0311-141189-011-h08 BT0311 Homo sapiens cDNA
1385	14419	27388	1.33	3.0E-48	AV690864.1	EST_HUMAN	u47a02.x1 NCL_CGAP_P228 Homo sapiens cDNA clone IMAGE:2254154 3'
1893	15014	28020	16.21	3.0E-48	4885170	NT	AV690864 GKC Homo sapiens cDNA clone GKCDRE12 5'
1993	15014	28021	16.21	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
3429	16477	29368	0.93	3.0E-48	AF172453.1	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
3647	16680	29606	0.75	3.0E-48	AW694531.1	EST_HUMAN	Homo sapiens opid growth factor receptor mRNA, complete cds
4275	17304		0.9	3.0E-48	AA009541.1	EST_HUMAN	h14b12.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2872255 3' similar to SW:DCRB_HUMAN
							P66555 DOWN SYNDROME CRITICAL REGION PROTEIN B. ;
							z104g03.t1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429844 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6997	19081	32278	2.41	3.0E-48	BE084571.1	EST_HUMAN	MR4-BT0657-060400-201-e10 BT0657 Homo sapiens cDNA
7215	20237	33571	1.08	3.0E-48	AF087813.1	NT	Human endogenous retrovirus HERV-P-T47D
8734	21702		4.11	3.0E-48	AA658930.1	EST_HUMAN	inv03105.s1 NCI_CGAP_P222 Homo sapiens cDNA clone IMAGE:1219137 3' similar to contains PTR5.b1
11221	24174	37700	6.89	3.0E-48	BF514170.1	EST_HUMAN	PTR5 repetitive element;
5	13126	26025	2.4	2.0E-48	AA465007.1	EST_HUMAN	ULH-BW1-ant-e-10-Q-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082267 3'
47	13187	26072	1.23	2.0E-48	AA631940.1	EST_HUMAN	z680c03.r1 Soares ovary tumor NIHOT Homo sapiens cDNA clone IMAGE:810052 5'
1223	14281		0.65	2.0E-48	H24278.1	EST_HUMAN	finf67 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR17-26
4582	17585	30477	0.92	2.0E-48	BE246055.1	EST_HUMAN	ym55e10.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:52182 5' similar to
5912	18998	32188	0.63	2.0E-48	AA613171.1	EST_HUMAN	SP-M88_MOUSE P35803 MEMBRANE GLYCOPROTEIN;
6912	18998	32189	0.63	2.0E-48	AA613171.1	EST_HUMAN	TCBAP1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP3842
7762	20715	34086	3.9	2.0E-48	AB040934.1	NT	no18g01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1101072 3'
7762	20715	34087	3.9	2.0E-48	AB040934.1	NT	no18g01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1101072 3'
7777	20730	34103	3.52	2.0E-48	11496238	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
8698	21668	35089	1.37	2.0E-48	AV743451.1	EST_HUMAN	Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA), mRNA
12318	13126	26025	3.8	2.0E-48	AA465007.1	EST_HUMAN	AV743451 CB Homo sapiens cDNA clone CBCCGG10 5'
58	13177	26089	3.37	1.0E-48	7706534	NT	z680c03.r1 Soares ovary tumor NIHOT Homo sapiens cDNA clone IMAGE:810052 5'
874	13630	26888	1.61	1.0E-48	4502168	NT	Homo sapiens cisplatin resistance-associated overexpressed protein (LOC51747), mRNA
1077	14122	27073	1.8	1.0E-48	7657430	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1077	14122	27074	1.8	1.0E-48	7657430	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
1289	14335	27298	5.08	1.0E-48	5032032	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
1833	14957	27954	14.5	1.0E-48	AL163307.2	NT	Homo sapiens RNA binding motif protein 6 (RBM6) mRNA
3500	16547	28473	0.83	1.0E-48	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C102
6420	19487	32730	1.17	1.0E-48	AB898077.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
6420	19487	32737	1.17	1.0E-48	AB898077.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
6648	19708		1.03	1.0E-48	Y18000.1	NT	id17601.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR-O14588 O14588
6748	19802	33082	0.7	1.0E-48	AB028994.1	NT	SIMILARITY TO U73941;
6748	19802	33083	0.7	1.0E-48	AB028994.1	NT	id17601.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR-O14588 O14588
							SIMILARITY TO U73941;
							id17601.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR-O14588 O14588
							SIMILARITY TO U73941;
							Homo sapiens NF2 gene
							Homo sapiens mRNA for KIAA1071 protein, partial cds
							Homo sapiens mRNA for KIAA1071 protein, partial cds

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7471	20437	33704	3.15	1.0E-48	4755137	NT	Homo sapiens huntingtin (Huntington disease) (HD) mRNA
9183	22149	35578	0.49	1.0E-48	4758985	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
9183	22149	35577	0.49	1.0E-48	4758985	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
9568	22530	35660	1.19	1.0E-48	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
9823	22567	36017	7.13	1.0E-48	AB033071.1	NT	Homo sapiens mRNA for KIAA1245 protein, partial cds
9824	22803	36280	0.69	1.0E-48	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
9841	22868	36330	4.48	1.0E-48	BF304683.1	EST_HUMAN	60188806F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
10738	23658	37151	3.85	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
10738	23658	37152	3.85	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
12280	25830		1.63	1.0E-48	W28785.1	EST_HUMAN	1568 Human retina cDNA randomly primed sublibrary/Homo sapiens cDNA
6171	19246	32478	3	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
6171	19246	32479	3	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
7017	20143	33460	0.57	8.0E-49	AAG42035.1	EST_HUMAN	ns18103.r1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1184021 5'
8638	21806	35028	3.32	8.0E-49	U23850.1	NT	Human insulin 1,4,5 trisphosphate receptor type 1 mRNA, partial cds
10348	23272	36748	2.1	8.0E-49	AB008661.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
11204	24158	37688	2.32	8.0E-49	AI623722.1	EST_HUMAN	ts33d12.x1 NCI CGAP_U44 Homo sapiens cDNA clone IMAGE:2230871 3' similar to contains Alu repetitive element/contains element PTR5 repetitive element;
140	13468	26398	2.24	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
140	13468	26399	2.24	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
393	13468	26398	1.53	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
393	13468	26399	1.53	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
394	13468	26398	2.06	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
394	13468	26399	2.06	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
1225	14263	27220	2.85	7.0E-49	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5535	18632	31571	1.57	7.0E-49	AI807191.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356883 3' similar to TR:064823
5545	18642	31582	1.33	7.0E-49	AL120337.1	EST_HUMAN	O54823 RSEC15.;
5903	18632	31571	0.84	7.0E-49	AI807191.1	EST_HUMAN	DKFZp782C0333_s1 782 (synonym: hme2) Homo sapiens cDNA clone DKFZp782C0333 3'
198	13299	26227	86.86	6.0E-49	AW731740.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356883 3' similar to TR:064823
4142	17173	30062	1.14	6.0E-49	AL162091.1	EST_HUMAN	O54823 RSEC15.;
6582	19642	32909	0.65	6.0E-49	AU140742.1	EST_HUMAN	ba55g05.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900504 3' similar to gb:X17206 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
							DKFZp781A138_s1 781 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781A138 3'
							AU140742 PLACE4 Homo sapiens cDNA clone PLACE4000148 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11609	24547	38107	2	6.0E-49	AW452218.1	EST_HUMAN	UIH-B13-alo-a-05-0-UI.s1 NC1_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068048 3'
11972	24850	38446	4.09	6.0E-49	AA366566.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
11972	24850	38447	4.09	6.0E-49	AA366566.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
12645	26723		1.7	6.0E-49	AA707567.1	EST_HUMAN	ZJ29-08.s1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451684 3'
713	13775	26708	8.21	6.0E-49	AL168210.2	NT	Homo sapiens chromosome 21 segment HS21C010
713	13775	26709	8.21	6.0E-49	AL168210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1809	14837	27828	3.44	5.0E-49	AA172121.1	EST_HUMAN	zp26c07.r1 Stratagene neuroepithelium (8837231) Homo sapiens cDNA clone IMAGE:810860 5' similar to TR:G233228 G233228 RTVL-H1 PROTEIN, contains LTR7.5 LTR7 LTR7 repetitive element ;
2760	15752	28772	9.75	5.0E-49	U17714.1	NT	Homo sapiens putative tumor suppressor ST13 (ST13) mRNA, complete cds
3286	16340	28258	6.07	5.0E-49	11493555	NT	Homo sapiens similar to ribosomal protein S27 (metalloproteinin 1) (H. sapiens) (LOC83362), mRNA
528	13597	28514	25.9	4.0E-49	AW189533.1	EST_HUMAN	x08b01.x1 NC1_CGAP_UW Homo sapiens cDNA clone IMAGE:2875683 3' similar to WP:B0350.2B
7457	20423	33778	1.06	4.0E-49	Z26634.2	NT	CE06703 ;
7457	20423	33778	1.06	4.0E-49	Z26634.2	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
7487	20452	33811	0.66	4.0E-49	11525737	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
7487	20452	33812	0.66	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactose:antipeptide N-acetylgalactosaminyltransferase 8
8109	21046	34446	0.71	4.0E-49	7882209	NT	(GalNAc-T8) (GALNT8), mRNA
8216	22182	35614	0.53	4.0E-49	11425374	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactose:antipeptide N-acetylgalactosaminyltransferase 8
8216	22182	35615	0.53	4.0E-49	11425374	NT	(GalNAc-T8) (GALNT8), mRNA
12508	25839		8.71	4.0E-49	AA210798.1	EST_HUMAN	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
12594	25297		3.19	4.0E-49	AF240788.1	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactose:antipeptide N-acetylgalactosaminyltransferase 8
582	13632	28549	1.27	3.0E-49	X68968.1	NT	(GalNAc-T8) (GALNT8), mRNA
2656	18653		1.93	3.0E-49	AA016131.1	EST_HUMAN	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
5019	18033	30919	2.11	3.0E-49	U46999.1	NT	Homo sapiens copine III (CPNE3), mRNA
7650	20610	33878	10.82	3.0E-49	H39479.1	EST_HUMAN	Homo sapiens copine III (CPNE3), mRNA
11633	24570	36134	1.54	3.0E-49	AA337561.1	EST_HUMAN	Homo sapiens copine III (CPNE3), mRNA
682	13728		3.89	2.0E-49	BE165980.1	EST_HUMAN	z98105.r1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:682877 5'
3238	16291	29213	1.5	2.0E-49	N26446.1	EST_HUMAN	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
							H. sapiens mRNA for acetyl-CoA carboxylase
							z931c05.r1 Scores retina N254-HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.53 L1
							repetitive element ;
							Human type IV collagen (COL4A6) gene, exon 40
							EST25e12 WATM1 Homo sapiens cDNA clone 25e12
							EST42572 Endometrial tumor Homo sapiens cDNA 5' end
							MF3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
							y23006.r1 Scores melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:282571 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3583	16828	26547	0.78	2.0E-49	AF026564.1	NT	Homo sapiens RNA binding protein II (RBMII) gene, complete cds
6800	18952	33249	1.14	2.0E-49	AV1717838.1	EST_HUMAN	AV1717838 DCB Homo sapiens cDNA clone DCBALB01 5'
8438	21405		1.62	2.0E-49	M86033.1	EST_HUMAN	EST026568 Fetal brain, Strabagene (cat#836206) Homo sapiens cDNA clone HFBCY60
12603	25821		2.57	2.0E-49	AF163964.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
800	13955		9.35	1.0E-49	BF036327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3662086 5'
1557	14589	27660	1.27	1.0E-49	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1818	14945	27837	3.33	1.0E-49	BE255216.1	EST_HUMAN	601115768F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356273 5'
5433	18535	31444	5.72	1.0E-49	BF131007.1	EST_HUMAN	601820053F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052052 5'
6198	19270	32505	0.87	1.0E-49	H18291.1	EST_HUMAN	yn48104.1 Soares adult brain N2b5fIB65Y Homo sapiens cDNA clone IMAGE:171703 5' similar to SP:GBG1_HUMAN Q08447 GUANINE NUCLEOTIDE-BINDING PROTEIN G(T) GAMMA-1 SUBUNIT ;
6202	19278	32510	1	1.0E-49	AW064640.1	EST_HUMAN	EST7376713 MAGC resequences, MAGH Homo sapiens cDNA
7427	20394	33744	0.58	1.0E-49	AV703000.1	EST_HUMAN	AV703000 ADB Homo sapiens cDNA clone ADBGVD11 5'
7427	20394	33745	0.58	1.0E-49	AV703000.1	EST_HUMAN	AV703000 ADB Homo sapiens cDNA clone ADBGVD11 5'
7433	20400	33763	3.3	1.0E-49	BE988110.1	EST_HUMAN	601280330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620963 5'
7433	20400	33754	3.3	1.0E-49	BE988110.1	EST_HUMAN	601280330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620963 5'
7520	20485	33846	2.2	1.0E-49	N25884.1	EST_HUMAN	yn78g12.s1 Soares placenta 8to9weeks 2N8fIP8to9W Homo sapiens cDNA clone IMAGE:258406 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
7520	20485	33847	2.2	1.0E-49	N25884.1	EST_HUMAN	similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
8414	21383	34780	0.69	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8414	21383	34781	0.69	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
9023	21889		0.78	1.0E-49	8894184	NT	Homo sapiens RNA binding motif protein 7 (LOC51120), mRNA
9344	22309	35734	1.14	1.0E-49	BE409340.1	EST_HUMAN	601300892F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635398 5'
10485	23407	36903	1.22	1.0E-49	AL043129.2	EST_HUMAN	DKF7p434D2423_j1 434 (synonym: htes3) Homo sapiens cDNA clone DKF7p434D2423 5'
11389	24344	37877	1.99	1.0E-49	AB020335.1	NT	Homo sapiens Pancreas-specific TSA305 mRNA, complete cds
11640	24577	38143	3.12	1.0E-49	11427366	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
12147	25007		1.7	1.0E-49	BE169343.1	EST_HUMAN	MFR0-HIT0407-070200-008-402 HT0407 Homo sapiens cDNA
12502	25241		2.78	1.0E-49	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6544	25987		1.08	9.0E-50	BE295758.1	EST_HUMAN	601178250F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531588 5'
171	13273	26188	3.9	8.0E-50	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
720	13782	26716	2.14	8.0E-50	X965097.2	NT	Homo sapiens mRNA for VIP receptor 2
720	13782	26717	2.14	8.0E-50	X965097.2	NT	Homo sapiens mRNA for VIP receptor 2
1778	14807	27793	4	8.0E-50	4501880	NT	Homo sapiens actinin, alpha 1 (ACTN1) mRNA
2710	15704	28720	2.18	8.0E-50	4826658	NT	Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
621	13686	26604	0.68	7.0E-50	BE085591.1	EST_HUMAN	QV0-BT0703-280400-211-a08 BT0703 Homo sapiens cDNA
6852	20176	33500	1.21	7.0E-50	BF061922.1	EST_HUMAN	RC8-TN0073-150800-011-A12 TN0073 Homo sapiens cDNA
6852	20176	33501	1.21	7.0E-50	BF061922.1	EST_HUMAN	RC8-TN0073-150800-011-A12 TN0073 Homo sapiens cDNA
7528	20480	33852	0.62	7.0E-50	AA627822.1	EST_HUMAN	nc88a12.s1 NCL_CGAP_Cc9 Homo sapiens cDNA clone IMAGE:1148206 3' similar to gb:X68391.60S
11108	24068	37680	28.06	7.0E-50	AJ872137.1	EST_HUMAN	RIBOSOMAL PROTEIN L6 (HUMAN);
8558	21524					EST_HUMAN	hm55g11.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:2436908 3'
11168	24124	37652	6.98	6.0E-50	BE044076.1	EST_HUMAN	hm55g11.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER20.b3
11168	24124	37653	7.98	6.0E-50	AA312079.1	EST_HUMAN	MER29 repetitive element;
1808	14836	27826	1.18	5.0E-50	BF332938.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
1808	14836	27827	1.18	5.0E-50	BF332938.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
8448	22412		5.65	5.0E-50	AA557683.1	EST_HUMAN	CMD-BT0782-300500-388-b05 BT0782 Homo sapiens cDNA
918	13972		1.45	4.0E-50	AA801143.1	EST_HUMAN	CMD-BT0782-300500-388-b05 BT0782 Homo sapiens cDNA
6497	19561	32813	0.54	4.0E-50	11440683	NT	nm45h10.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.13 PTR5
7445	20411	33763	0.93	4.0E-50	BE087536.1	EST_HUMAN	repetitive element;
1955	14978		2.86	3.0E-50	M18048.1	NT	nc54e09.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1
2325	15528	28549	1.11	3.0E-50	BE259198.1	EST_HUMAN	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
3310	16363	29283	0.88	3.0E-50	AA746142.1	EST_HUMAN	Homo sapiens cysteinyl-RNA synthetase (CARS), mRNA
6834	19887	33180	0.6	3.0E-50	11418317	NT	QV1-BT0681-280300-127-f12 BT0681 Homo sapiens cDNA
6834	19887	33181	0.6	3.0E-50	11418317	NT	Human endogenous retrovirus RTVL-H2
6929	20163	33472	1.56	3.0E-50	11421514	NT	601109717F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350309 5'
7906	20849	34234	4.3	3.0E-50	AF233436.2	NT	cd03106.s1 NCL_CGAP_K043 Homo sapiens cDNA clone IMAGE:1322627 3'
7906	20849	34235	4.3	3.0E-50	AF233436.2	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 12 (PTPN12), mRNA
8929	21895	35323	0.61	3.0E-50	6601589	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 12 (PTPN12), mRNA
10177	23102	36582	1.1	3.0E-50	AB046818.1	NT	Homo sapiens similar to some domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC53232), mRNA
10188	23111	36595	0.98	3.0E-50	11418514	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
10885	23805	37309	0.74	3.0E-50	AB002297.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
11438	24381	37820	1.89	3.0E-50	11436955	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
						NT	Homo sapiens arylkin-like with transmembrane domains 1 (ANKTM1), mRNA
						NT	Homo sapiens mRNA for KIAA1598 protein, partial cds
						NT	Homo sapiens t-complex 10 (a murine top homolog) (TCP10), mRNA
						NT	Human mRNA for KIAA0289 gene, partial cds
						NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11782	23947	37468	8.4	3.0E-50	AJ245621.1	NT	Homo sapiens CTL2 gene
778	19837		6.8	2.0E-50	AF055068.1	NT	Homo sapiens MHC class 1 region
1081	14125	27078	6.73	2.0E-50	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1) mRNA
1437	14470	27448	0.95	2.0E-50	AF138303.1	NT	Homo sapiens decorin D mRNA, complete cds, alternatively spliced
3300	16353	28272	0.83	2.0E-50	AF11168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
4289	17318	30197	0.75	2.0E-50	D86424.1	NT	Mus musculus mRNA for high-sulfur keratin protein, partial cds
7051	20073	33380	0.51	2.0E-50	AU124065.1	EST_HUMAN	AU124065 NT2RM2 Homo sapiens cDNA clone NT2RM2001609 5'
8658	21627	35047	1.09	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8659	21627	35048	1.09	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8799	21768	35189	6.78	2.0E-50	X06956.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8799	21768	35190	6.78	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
10244	23169	36657	1.43	2.0E-50	8910283	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
10244	23169	36658	1.43	2.0E-50	8910283	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
11971	24849		1.52	2.0E-50	AF029881.1	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
462	13335	28461	2.26	1.0E-50	AL163209.2	NT	Macaca mulatta cyclophilin A mRNA, complete cds
2373	16381		9.27	1.0E-50	AJ271735.1	NT	Homo sapiens chromosome 21 segment HS21C009
7970	20909		0.55	1.0E-50	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
10593	23476	36670	0.97	1.0E-50	D11078.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
6095	19174	32390	1.01	9.0E-51	AW511226.1	EST_HUMAN	Hd44602.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912378 3' similar to TR:085638
6350	19419	32660	0.71	9.0E-51	AA744837.1	EST_HUMAN	Q95638 CAMP-REGULATED GUANINE NUCLEOTIDE EXCHANGE FACTOR II. ;
9020	21986	35407	0.55	9.0E-51	AJ791154.1	EST_HUMAN	ny67h03.a1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1263381 3'
9879	22632	36088	1.2	9.0E-51	AA043738.1	EST_HUMAN	ab23g04.x5 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:841688 3' similar to
9858	22794	36245	0.52	9.0E-51	AJ791154.1	EST_HUMAN	SW:PSM_HUMAN Q04608 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
9858	22794	36246	0.52	9.0E-51	AJ791154.1	EST_HUMAN	ab23g04.x5 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:486352 5'
11804	23959	37483	1.5	9.0E-51	H89078.1	EST_HUMAN	ab23g04.x5 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:841688 3' similar to
11804	23959	37484	1.5	9.0E-51	H89078.1	EST_HUMAN	SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
4599	17620	30513	6.51	8.0E-51	AA610842.1	EST_HUMAN	yw24g08.t1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:263210 5'
7914	20957	34245	2.04	8.0E-51	11439587	NT	yw24g08.t1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:263210 5'
9819	22668		0.98	8.0E-51	AU138590.1	EST_HUMAN	np88e09.a1 NCI CGAP_Lu1 Homo sapiens cDNA clone IMAGE:1142440 3' similar to gb:U12871_rna1
							HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
							Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
							AU138590 PLACE1 Homo sapiens cDNA clone PLACE1008887 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3295	16348	29268	1.68	7.0E-51	AW889219.1	EST_HUMAN	QV4-NT0028-200400-180-d05 NT0028 Homo sapiens cDNA
3374	16424	28349	0.72	7.0E-51	AW274720.1	EST_HUMAN	xs34a03.x1 NCI CGAP Kd11 Homo sapiens cDNA clone IMAGE:2685594 3' similar to TR-Q8Z340
4196	17227	30116	1.4	7.0E-51	AL078628.1	EST_HUMAN	Q8Z340 ATYPICAL PKC SPECIFIC BINDING PROTEIN. ;
4198	17227	30117	1.4	7.0E-51	AL078628.1	EST_HUMAN	DKFZp434B2228_t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B2228 5'
4378	17406	30288	1.54	7.0E-51	AW295933.1	EST_HUMAN	DKFZp434B2228_t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B2228 5'
11893	24870	38466	2.13	7.0E-51	AF161449.1	NT	UIH-BWO-qlp-b-05-Q-U1.s1 NCI CGAP Sub66 Homo sapiens cDNA clone IMAGE:2728817 3'
1530	14563	27534	0.91	6.0E-51	6678763	NT	Homo sapiens HSPC331 mRNA, partial cds
							Homo sapiens putative DNA binding protein (M96), mRNA
1996	15017	28024	5.54	6.0E-51	7657266	NT	Homo sapiens KIAA0829 protein Mac2 Interacting nuclear target (MINT) homolog (KIAA0829), mRNA
3487	16533	29458	17.23	6.0E-51	7657266	NT	Homo sapiens KIAA0829 protein Mac2 Interacting nuclear target (MINT) homolog (KIAA0829), mRNA
4338	17365	30247	0.69	6.0E-51	9810553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
4338	17365	30248	0.69	6.0E-51	9810553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
6105	19184	32403	2.8	6.0E-51	X01788.1	NT	Human hemoglobin related (Hpr) gene exon 3
6116	19194	32417	8.29	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6116	19194	32418	8.29	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6925	20149	33469	1.13	6.0E-51	4506736	NT	Homo sapiens ribosomal protein S8 kinase, 70kD, polypeptide 1 (RPS8K(B1)) mRNA
7076	20098	33408	1.03	6.0E-51	11416751	NT	Homo sapiens non-kinase Cdc42 effector protein SPEC2 (LOC56690), mRNA
7157	18389	31233	2.28	6.0E-51	11428669	NT	Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA
9492	22456	35895	0.62	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
9492	22456	35898	0.62	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
10042	22968	36436	2.04	6.0E-51	7661535	NT	Homo sapiens B9 protein (B9), mRNA
10120	23046	36525	1.14	6.0E-51	U50093.1	NT	Human ankyrin (ANK1) gene, exon 2
11585	24523	38078	1.55	6.0E-51	11528289	NT	Homo sapiens interleukin 17 receptor (IL17R), mRNA
792	13851	26798	8.57	5.0E-51	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
804	13862	26812	1.9	5.0E-51	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
993	15866	26968	1.23	6.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1612	14844	27620	1.02	5.0E-51	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2589	15600	28619	7.72	5.0E-51	AJ007558.1	NT	Homo sapiens mRNA for nucleoporin 155
3965	17006	29619	1.85	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
3965	17006	29619	1.85	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
11610	24548	38108	4.07	5.0E-51	5803136	NT	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
135	13240	26171	1.63	3.0E-51	AI587348.1	EST_HUMAN	tr1c09.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M28326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1180	14221	27177	3.31	3.0E-51	AI587348.1	EST_HUMAN	tr1c09.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M28326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1940	14984	27961	1.09	3.0E-51	AA211298.1	EST_HUMAN	z987g01.s1 Stragene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:849008 3'
4354	17381	30263	2.23	3.0E-51	AL159142.1	NT	Novel human gene mapping to chromosome 22
7831	20779	34157	1.2	3.0E-51	R15914.1	EST_HUMAN	ye47c08.l1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:53233 5' similar to gb:M14123_cds4 RETROVIRUS-RELATED POLYPROTEIN (HUMAN); contains LTR5 repetitive element;
9191	22167		4.32	3.0E-51	M28063.1	NT	Human htrfRNP C2 protein mRNA
9423	26008		0.46	3.0E-51	AW583777.1	EST_HUMAN	is04d06.y1 Human Pancreatic Islets Homo sapiens cDNA 5'
12810	25435		1.36	3.0E-51	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
366	13452	26380	1.19	2.0E-51	4507768	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
689	13752	26678	0.66	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
689	13752	26679	0.66	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
1697	14727	27710	4.99	2.0E-51	AA233352.1	EST_HUMAN	zr30a05.l1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:664880 5' similar to TR-C233228 G233228 RTV-L-H PROTEIN, contains LTR7 L3 LTR7 repetitive element;
3745	16787	29689	2.46	2.0E-51	AI492415.1	EST_HUMAN	u27g03.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2131732 3'
4521	17546	30433	0.69	2.0E-51	AW137826.1	EST_HUMAN	UHF-B11-adj-d-02-Q-U1.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2716851 3'
5513	18613	31545	0.57	2.0E-51	AI732851.1	EST_HUMAN	ds34f09.x5 NCL CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
5513	18613	31546	0.67	2.0E-51	AI732851.1	EST_HUMAN	ds34f09.x5 NCL CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
6131	19208	32433	4.17	2.0E-51	BE782015.1	EST_HUMAN	601470446F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873563 5'
7531	20494		0.68	2.0E-51	AF219927.1	NT	Homo sapiens diacylglycerol kinase beta (DGKB) gene, exon 23
7690	20648	34012	0.91	2.0E-51	7682349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
9046	22012	35434	1.54	2.0E-51	BE901994.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3659613 5'
9046	22012	35435	1.54	2.0E-51	BE901994.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3659613 5'
9389	22354	35785	0.97	2.0E-51	11037064	NT	Homo sapiens disrupted in schizophrenia 1 (DISC1), mRNA
9870	22823	36278	1.35	2.0E-51	AB17078.1	EST_HUMAN	ts74d07.x1 NCL CGAP_GC8 Homo sapiens cDNA clone IMAGE:2236980 3' similar to SW:TRKC_HUMAN Q16288 NT-3 GROWTH FACTOR RECEPTOR PRECURSOR;
9862	22869	36350	6.78	2.0E-51	BE165980.1	EST_HUMAN	MF3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9977	22904	36388	0.53	2.0E-51	AB007828.1	NT	Homo sapiens mRNA for KIAA0457 protein, partial cds
10769	23720	37223	1.54	2.0E-51	AV682474.1	EST_HUMAN	AV682474 GKB Homo sapiens cDNA clone GKBAGF05 5'
10838	23758	37258	1.14	2.0E-51	AA378558.1	EST_HUMAN	EST191296 Synovial sarcoma Homo sapiens cDNA 5' end
11655	18613	31545	7.03	2.0E-51	AJ732851.1	EST_HUMAN	cd34f09.x5 NCI_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1325509 3' similar to SW:NME1_MOUSE P35-438 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
11655	18613	31546	7.03	2.0E-51	AJ732851.1	EST_HUMAN	cd34f09.x5 NCI_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1325509 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
12122	24991	38592	2.3	2.0E-51	AA011688.1	EST_HUMAN	z03a01.1 Scores fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428672 5'
12803	25430	31740	2	2.0E-51	11419169	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) (Drosophila) homolog); translocated to, 4 (MLLT4), mRNA
114	13225	28149	8.48	1.0E-51	4503528	NT	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1) mRNA
1491	14524	30352	33.7	1.0E-51	AV742248.1	EST_HUMAN	AV742248 CB Homo sapiens cDNA clone CBFBCG12 5'
4437	17483	30352	0.99	1.0E-51	4759071	NT	Homo sapiens small inducible cytokine subfamily A (Oye-Cys), member 15 (SCYA15) mRNA
4437	17483	30353	0.99	1.0E-51	4759071	NT	Homo sapiens small inducible cytokine subfamily A (Oye-Cys), member 15 (SCYA15) mRNA
5463	18565	31476	3.04	1.0E-51	T18982.1	EST_HUMAN	b12053 Testis 1 Homo sapiens cDNA clone b12056
7011	20854	34242	0.98	1.0E-51	AI672632.1	EST_HUMAN	bc39g02.x1 Scores_NHMPu_S1 Homo sapiens cDNA clone IMAGE:2089108 3'
8235	21204	34809	0.79	1.0E-51	BF434360.1	EST_HUMAN	708602.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3644091 3' similar to TR:P87892 P87892 PROTEASE ;
12073	28012		1.67	1.0E-51	AV760590.1	EST_HUMAN	AV760590 MDS Homo sapiens cDNA clone MDC3B802 5'
12889	25283		5.29	9.0E-52	AA77621.1	EST_HUMAN	z85a07.s1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.LS THR repetitive element ;
153	13256	26184	9.3	8.0E-52	AA720574.1	EST_HUMAN	mw21g02.s1 NCI_CGAP_GC90 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.LS THR repetitive element ;
1495	14528	27500	1.77	8.0E-52	XB4900.1	NT	H.sapiens mRNA for laminin-5, alpha3b chain
1682	14694	27689	2.98	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
1682	14694	27670	2.98	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
4019	14694	27689	6.44	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
4019	14694	27670	6.44	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
7760	20713	34082	0.69	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7760	20713	34083	0.69	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8967	22332	35782	1.55	7.0E-52	W58471.1	EST_HUMAN	2c56a08.1l Soares_papillarythroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:326578 5' similar to contains Alu repetitive element
1191	14231		0.65	6.0E-52	BE072408.1	EST_HUMAN	QV3-B10637-271289-049-007 BT0537 Homo sapiens cDNA
1703	14733	27715	3.37	6.0E-52	AF109807.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
5816	18906	32089	1.06	6.0E-52	A1208794.1	EST_HUMAN	gg44f04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638047 3'
11543	24484	38037	1.63	6.0E-52	BE048172.1	EST_HUMAN	tz48f04.y1 NCI_CGAP_Bim52 Homo sapiens cDNA clone IMAGE:2291671 5' similar to SW:PGEM_MOUSE C05783 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR ;
4469	17495	30383	1.6	5.0E-52	Z78898.1	NT	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA1817
9747	22888	36144	0.47	5.0E-52	11437365	NT	Homo sapiens FSHD region gene 1 (FRG1), mRNA
1670	14702	27677	1.25	4.0E-52	AF257318.1	NT	Homo sapiens SH3-containing protein SH3GLB1 mRNA, complete cds
1803	14831	27818	1.15	4.0E-52	4758843	NT	Homo sapiens nucleoporin 155kD (NUP155) mRNA
4769	17789	30682	1	4.0E-52	A1768814.1	EST_HUMAN	w88b02.x1 NCI_CGAP_Ku112 Homo sapiens cDNA clone IMAGE:2400459 3'
5359	18464	31334	1.41	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
5359	18464	31335	1.41	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
7843	20886	34278	0.69	4.0E-52	11525731	NT	Homo sapiens RAD61-interacting protein (PIR51), mRNA
8379	21342	34753	2.33	4.0E-52	BE622032.1	EST_HUMAN	601440687F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3818536 5'
8879	21846	35268	6.18	4.0E-52	11417035	NT	Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA
12426	25194		3.05	4.0E-52	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12806	25488		4.73	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P2X4, complete cds
4119	17152		11.15	3.0E-52	11437042	NT	Homo sapiens hypothetical protein FLJ10675 (FLJ10675), mRNA
584	19634	26550	1.97	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
584	19634	26551	1.97	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
2030	18049	28084	1.43	2.0E-52	AB033075.1	NT	Homo sapiens mRNA for KIAA1249 protein, partial cds
2507	15510	28537	1.95	2.0E-52	BE207575.1	EST_HUMAN	bb68b07.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030421 5' similar to gb:U16463 M.musculus mRNA for Zfp-1 zinc finger protein (MOUSE);
2746	15739		10.45	2.0E-52	BF677892.1	EST_HUMAN	602084710F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248891 5'
5013	18027	30912	3.26	2.0E-52	AL137188.3	NT	Novel human gene mapping to chromosome 20, similar to membrane transporters
5049	18081	30939	0.98	2.0E-52	A1141802.1	EST_HUMAN	qs58a05.a1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1690784 3'
5049	18081	30940	0.98	2.0E-52	A1141802.1	EST_HUMAN	qs58a05.a1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1690784 3'
5788	18880	32062	3.71	2.0E-52	AW848041.1	EST_HUMAN	IL3-CT0214-231289-053-E12 CT0214 Homo sapiens cDNA
6503	19567	32819	1.7	2.0E-52	11141868	NT	Homo sapiens interleukin 21 receptor (IL21R), mRNA
6872	19925	33221	1.04	2.0E-52	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7129	20105	33416	0.73	2.0E-52	A1782146.1	EST_HUMAN	cs45d12.y5 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1608311 5'
8121	21058	34465	0.62	2.0E-52	5032158	NT	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
8121	21058	34468	0.62	2.0E-52	5032160	NT	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
9000	21988		11.69	2.0E-52	AF147880.1	NT	Macaca mulatta beta-tubulin mRNA, complete cds
9288	22254	35684	0.87	2.0E-52	AA778795.1	EST_HUMAN	z445g05.s1 Soares_fetal_liver_spleen_INFUS_S1 Homo sapiens cDNA clone IMAGE:453272 3'
9834	22683		1.05	2.0E-52	4788789	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (ND5) (NADH-coenzyme Q reductase) (NDUFS5) mRNA
10474	23368	36893	6.19	2.0E-52	5730038	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA
10474	23368	36894	6.19	2.0E-52	5730038	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA
11538	24479	38029	3.09	2.0E-52	A1831462.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11538	24479	38030	3.09	2.0E-52	A1831462.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11551	24492	38048	2.73	2.0E-52	AV715377.1	EST_HUMAN	AV715377 DCB Homo sapiens cDNA clone DCAIE03 5'
11680	24646		12.63	2.0E-52	W70260.1	EST_HUMAN	z449g12.y1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:344038 5'
11839	24819		2.73	2.0E-52	11417890	NT	Homo sapiens LIM domain kinase 2 (LIMK2), mRNA
12231	25982	31300	18.5	2.0E-52	AW236287.1	EST_HUMAN	xn72a07.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2700036 3' similar to contains Alu repetitive element; contains element LTR2 repetitive element;
12633	26319		7.5	2.0E-52	A1808985.1	EST_HUMAN	wf87d05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360849 3' similar to TR:Q16859
534	13605	26524	1.45	1.0E-52	AA634445.1	EST_HUMAN	Q16859 CARBOXYLESTERASE;
1373	14407	27377	9.6	1.0E-52	4504028	NT	z175h12.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743879 3'
2542	15544		2.17	1.0E-52	4502238	NT	Homo sapiens glutamate-aminomethylase (glutamine synthase) (GLUL) mRNA
3072	16128	28041	1.99	1.0E-52	S81070.1	NT	Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA
5406	18508	31398	4.22	1.0E-52	M28426.1	NT	pd4-reverse transcriptase homolog (retroviral element) [human, endogenous retroviral element RTVL-Hp1, Genomic, 680 nt]
6533	19596	32859	2.4	1.0E-52	U38964.1	NT	Human P-glycoprotein (MDR1) gene, exon 4
7864	20623	33987	2.35	1.0E-52	X07282.1	NT	Human PMS2 related (hPMSR2) gene, complete cds
8150	21087	34486	0.55	1.0E-52	U80017.1	NT	Human aldolase C gene for fructose-1,6-bisphosphate aldolase
8908	21776		1.13	1.0E-52	AL163227.2	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
9543	22508	35855	0.7	1.0E-52	AF078779.1	NT	Homo sapiens chromosome 21 segment HS21C027
10941	23861		1.21	1.0E-52	AW020370.1	EST_HUMAN	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10951	23871		1.14	1.0E-52	AL163202.2	NT	df08g05.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2463145 5'
						NT	Homo sapiens chromosome 21 segment HS21C002

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11117	24077	37601	1.84	1.0E-52	U48298.1	NT	Homo sapiens protein tyrosine phosphatase FTPCAAX1 (hPTPCAAX1) mRNA, complete cds
13114	25633	31608	1.3	1.0E-52	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
3805	16845	28762	0.9	9.0E-53	4508064	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B) mRNA
4418	17445	30336	0.81	9.0E-53	AF001446.1	NT	Homo sapiens core binding factor alpha1 subunit (CBFA1) gene, exon 3
12477	25225		2.56	7.0E-53	BF238465.1	EST_HUMAN	601804771F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132783 5'
12861	25653		6.21	7.0E-53	AI421782.1	EST_HUMAN	944807.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2089077 3' similar to contains TIR.11
5215	18224	31098	0.89	6.0E-53	BE285719.1	EST_HUMAN	601175776F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3530946 5'
4128	17159	30047	3	5.0E-53	4758543	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein C (G1/C2) (HNRPC) mRNA
12110	24980	38580	1.54	5.0E-53	BE729270.1	EST_HUMAN	601561627F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3831175 5'
12522	25253		1.67	6.0E-53	AW813568.1	EST_HUMAN	RC3-ST0197-151089-011-g10 ST0197 Homo sapiens cDNA
51	13171	26079	2.37	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
51	13171	26080	2.37	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4859	17678	30764	1.11	4.0E-53	7705414	NT	Homo sapiens hook1 protein (HOOK1), mRNA
9771	22712		0.82	4.0E-53	AI613037.1	EST_HUMAN	600804.x1 NCI_CGAP_U18 Homo sapiens cDNA clone IMAGE:2278327 3'
10114	23040		0.71	4.0E-53	F13080.1	EST_HUMAN	HSC3ID041 normalized Infant brain cDNA Homo sapiens cDNA clone c-3id04
11648	24489	38044	2.83	4.0E-53	BF128701.1	EST_HUMAN	601810868F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
11648	24489	38045	2.93	4.0E-53	BF128701.1	EST_HUMAN	601810868F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
2689	15688	26885	2.64	3.0E-53	AB026888.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
3744	16788	26698	1.01	3.0E-53	AW050836.1	EST_HUMAN	w22x-c07.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2558786 3'
6499	18598	31611	0.92	3.0E-53	AF001212.1	NT	Homo sapiens 26S proteasome subunit 9 mRNA, complete cds
6707	18802	31979	1.09	3.0E-53	11526297	NT	Homo sapiens MIL-1 protein (MIL-1), mRNA
6318	19389	32629	0.95	3.0E-53	BE160025.1	EST_HUMAN	QV1-HT0412-280300-123-c04 HT0412 Homo sapiens cDNA
7305	20276	33613	0.98	3.0E-53	Y10388.3	NT	H.sapiens graft gene
7305	20276	33614	0.88	3.0E-53	Y10388.3	NT	H.sapiens graft gene
8647	21615	35037	12.56	3.0E-53	S72043.1	NT	GIF-growth inhibitory factor [human, brain, Genomic, 2015 nt]
9211	22177	35607	0.89	3.0E-53	10835090	NT	Homo sapiens bone morphogenetic protein 6 (BMP6), mRNA
9412	22377		9.53	3.0E-53	5901953	NT	Homo sapiens FGFR1 oncogene partner (FOP), mRNA
458	13531		2.53	2.0E-53	AA366556.1	EST_HUMAN	EST177525 Pancreas tumor III Homo sapiens cDNA 5' end
2335	15346	25367	6.08	2.0E-53	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2543	15545		11.44	2.0E-53	4502316	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 31kD; Vacuolar proton-ATPase, subunit E; V-ATPase, subunit E (ATP6E), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2736	15730	28744	1.17	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
2736	15730	28745	1.17	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
3232	16287	29209	1.46	2.0E-53	7705687	NT	Homo sapiens leucine aminopeptidase (LOC31056), mRNA
3259	16313	29234	0.8	2.0E-53	AF083822.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 6
4088	17122	30016	2.78	2.0E-53	M61873.1	NT	Human Krueppel-related DNA-binding protein (TF34) gene, partial cds
4520	17545	30432	1.23	2.0E-53	4506862	NT	Homo sapiens SKAP55 homologue (SKAP-HOM) mRNA
5183	18202	31074	0.96	2.0E-53	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5183	18202	31075	0.96	2.0E-53	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5500	18600	31512	3.33	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0398-170800-001-g03 CT0398 Homo sapiens cDNA
5500	18600	31513	3.33	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0398-170800-001-g03 CT0398 Homo sapiens cDNA
8203	21173	34583	1.13	2.0E-53	AW975698.1	EST_HUMAN	EST387707 MAGE sequences, MAGN Homo sapiens cDNA
8340	21309		0.61	2.0E-53	AA056662.1	EST_HUMAN	IS429, seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9763	22704		15.48	2.0E-53	AW245678.1	EST_HUMAN	2822685, Sptm NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822685 5'
1440	14473	27450	2	1.0E-53	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
3421	16469	28389	1.29	1.0E-53	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5001	18015	30802	1.32	1.0E-53	BE296386.1	EST_HUMAN	601178725F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3631919 5'
6850	19903	33198	1.43	1.0E-53	BF364201.1	EST_HUMAN	CM4-NN1029-150800-543-g02 NN1029 Homo sapiens cDNA
7459	20425	33781	0.84	1.0E-53	BE012071.1	EST_HUMAN	RCS-BN1058-270400-031-D01 BN1058 Homo sapiens cDNA
8267	21236	34647	0.55	1.0E-53	AA248072.1	EST_HUMAN	IB571, seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9444	22408	35845	13.12	1.0E-53	X79536.1	NT	H. sapiens mRNA for htrRNPcore protein A1
12105	24976	38574	3.08	1.0E-53	X88411.1	NT	H. sapiens mRNA for myosin-IE
12105	24976	38575	3.08	1.0E-53	X88411.1	NT	H. sapiens mRNA for myosin-IE
5375	25636	31353	5.13	9.0E-54	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
208	19309	28236	1.73	8.0E-54	BE388785.1	EST_HUMAN	601272863F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614031 5'
1852	14878	27874	2.4	8.0E-54	4504810	NT	Homo sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
6045	19127	32333	23.25	8.0E-54	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
11962	24841	38434	1.67	8.0E-54	AW602568.1	EST_HUMAN	h44e05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834752 3'
11962	24841	38435	1.67	8.0E-54	AW582568.1	EST_HUMAN	h44e05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834752 3'
364	13497	28429	1.85	7.0E-54	AA812537.1	EST_HUMAN	a178c12.s1 Soares_testis_NHT Homo sapiens cDNA clone 1377046 3' similar to contains MER30.13 MER30 repetitive element
1847	14873	27869	1.51	7.0E-54	Y16845.1	NT	Homo sapiens mRNA for monocyte chemotactic protein-2

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2215	15228	28252	4.54	7.0E-54	N27177.1	EST_HUMAN	yw68d12.s1 Soares_placenta_8to9weeks_2NbltIP8tc9W Homo sapiens cDNA clone IMAGE:267399 3' similar to contains LTR7.b3 LTR7 repetitive element;
10487	23409	36906	1.91	7.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC83182), mRNA
11623	24561		3.26	7.0E-54	AI160188.1	EST_HUMAN	qb67g03.x1 Soares_fetal_heart_NbltHH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains ORF.11 ORF repetitive element;
25	13145	28045	2.06	6.0E-54	AB008818.1	NT	Homo sapiens DNA for MICB, exon 4, 5 and partial cds
385	13498	28430	0.67	6.0E-54	8822148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
385	13498	28431	0.67	6.0E-54	8822148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
3286	16349	29289	0.89	6.0E-54	8822148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
3540	16392	29517	0.88	6.0E-54	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4030	17068	29969	1.48	6.0E-54	4502872	NT	Homo sapiens chloride channel 6 (CLCN6) mRNA
4489	17514	30402	0.78	6.0E-54	AV754746.1	EST_HUMAN	AV754746 TP Homo sapiens cDNA clone TPGAAC10 5'
4819	17836	30734	0.94	6.0E-54	AV724885.1	EST_HUMAN	AV724885 HTB Homo sapiens cDNA clone HTBAE02 5'
4880	17897	30786	1.95	6.0E-54	4505808	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
4909	17928		1.23	6.0E-54	Y08846.1	NT	H. sapiens src pseudogene, p68 isoform
5035	17928		1.27	6.0E-54	Y08846.1	NT	H. sapiens src pseudogene, p68 isoform
11771	23926	37446	1.6	6.0E-54	11433623	NT	Homo sapiens KIAA0071 protein (KIAA0071), mRNA
11771	23926	37447	1.6	6.0E-54	11433623	NT	Homo sapiens KIAA0071 protein (KIAA0071), mRNA
2160	15176	28197	3.76	5.0E-54	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
184	13284		319.6	4.0E-54	AF110103.1	NT	Tupala belangeri beta-actin mRNA, partial cds
957	14010	26963	29.88	4.0E-54	AA306764.1	EST_HUMAN	EST1177686 Jurkat T-cells VI Homo sapiens cDNA 5' and similar to glyceraldehyde-3-phosphate dehydrogenase
1822	14849	27842	2.91	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
1822	14849	27843	2.91	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
3217	16272		1.03	4.0E-54	AB95098.1	EST_HUMAN	w428d11.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2328269 3' similar to TR:O02711
7524	20488		0.68	4.0E-54	BE544889.1	EST_HUMAN	O02711 PRO-POL-DUTPASE POLYPROTEIN;
63	13209	28133	13.65	3.0E-54	AA313487.1	EST_HUMAN	601075004F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3461017 5'
2632	16031		1.1	3.0E-54	AB06757.1	EST_HUMAN	EST185371 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' and
6007	19090	32290	1.52	3.0E-54	4502434	NT	IL-BT188-190399-007 BT188 Homo sapiens cDNA
7619	20579	33942	1.49	3.0E-54	AA844061.1	EST_HUMAN	Homo sapiens BMX non-receptor tyrosine kinase (BMX) mRNA
7619	20579	33943	1.49	3.0E-54	AA844061.1	EST_HUMAN	aib2c08.s1 Soares_parrathyroid_tumor_NbltHPA Homo sapiens cDNA clone IMAGE:1388270 3'
8081	21018	34418	0.51	3.0E-54	AT742822.1	EST_HUMAN	aib2c08.s1 Soares_parrathyroid_tumor_NbltHPA Homo sapiens cDNA clone IMAGE:1388270 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11363	24312		4.82	3.0E-54	11434803	NT	Homo sapiens golgi autoantigen, golgin subfamily a, 5 (GOLGA6), mRNA
11423	24367	37902	3.55	3.0E-64	BF345600.1	EST_HUMAN	U02019408F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4155121 5'
11696	24661	38239	2.11	3.0E-54	AA363362.1	EST_HUMAN	z70712.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR:G191315
12334	25134	31850	4.08	3.0E-54	AW954558.1	EST_HUMAN	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN.;
12380	25942		1.67	3.0E-54	AW748965.1	EST_HUMAN	EST366328 IMAGE resequences, MAGC Homo sapiens cDNA
643	13709	26629	6.22	2.0E-54	5031900	NT	RC1-BT0313-131169-011-b09 BT0313 Homo sapiens cDNA
1367	14401	27371	1.48	2.0E-54	4507164	NT	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA
1550	14583	27554	1.32	2.0E-54	AA655008.1	EST_HUMAN	Homo sapiens nuclear antigen Sp100 (SP100) mRNA
2548	15547	28570	1.04	2.0E-54	AW163175.1	EST_HUMAN	m178a08.s1 NCI_CGAP_P13 Homo sapiens cDNA clone IMAGE:1204800 similar to contains element L1
2808	15607	28631	1.45	2.0E-54	AL163210.2	NT	repetitive element;
2905	15984	28887	1.4	2.0E-54	AW057524.1	EST_HUMAN	au20203.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2763764 5' similar to SW:GLI.1_HUMAN Q13616 CULLIN HOMOLOG 1;
3559	16905		6.43	2.0E-54	AA532925.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
4232	17261		1.73	2.0E-54	4502842	NT	wy60b12.x1 Soares_NSF F8 gW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2552927 3' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
4470	17498		1.18	2.0E-54	AF208161.1	NT	m45g08.s1 NCI_CGAP_P19 Homo sapiens cDNA clone IMAGE:985488 similar to gb:X53777 80S RIBOSOMAL PROTEIN L23 (HUMAN);
4914	17831	30822	0.98	2.0E-54	7706446	NT	Homo sapiens chaperonin containing T-complex subunit 6 (CCT6) mRNA
5278	18284	31147	1.07	2.0E-54	4506962	NT	Homo sapiens synovial precursor, mRNA, complete cds
5551	18948	31591	1.8	2.0E-54	4759069	NT	Homo sapiens peptidylarginine deiminase type III (LOC51702), mRNA
5684	18779	31952	1.25	2.0E-54	BE047884.1	EST_HUMAN	Homo sapiens SKAP55 homologue (SKAP-HOM) mRNA
5856	18946	32131	3.9	2.0E-54	11428657	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14) mRNA
5961	18046	32245	10.03	2.0E-54	AB046811.1	NT	ts23c11.y1 NCI_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2281348 5'
5961	18046	32246	10.03	2.0E-54	AB046811.1	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
6814	18868	33157	0.77	2.0E-54	AF008915.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6883	20206	33535	0.73	2.0E-54	AB023212.1	NT	Homo sapiens EVI5 homolog mRNA, complete cds
6883	20206	33536	0.73	2.0E-54	AB023212.1	NT	Homo sapiens mRNA for KIAA0695 protein, partial cds
7330	20301	33645	7.68	2.0E-54	11428544	NT	Homo sapiens mRNA for KIAA0695 protein, partial cds
9887	22914	36379	4.03	2.0E-54	AB001026.1	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1), mRNA
10369	23292	36768	1.61	2.0E-54	11429127	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
10480	23402	36889	0.86	2.0E-54	11416762	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
							Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10480	23402	36800	0.88	2.0E-54	11416762	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
12034	24910		4.31	2.0E-54	7957454	NT	Homo sapiens pescadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
4492	17517		1.8	1.0E-54	BF315418.1	EST_HUMAN	601889230F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126535 5'
9081	22047	35470	0.51	1.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC83182), mRNA
10615	23537	37035	0.51	1.0E-54	AA412409.1	EST_HUMAN	zu10a09.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:731484 5'
10616	23637	37038	0.51	1.0E-54	AA412409.1	EST_HUMAN	zu10a09.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:731484 5'
12898	25554		4.2	1.0E-54	ALU077341.1	EST_HUMAN	ALU077341 Sugano cDNA library Homo sapiens cDNA clone Zv6C880 similar to 5'-end region of Human gamma-glutamyl transpeptidase mRNA, 5 end
10724	23646	37139	0.85	9.0E-55	BE081469.1	EST_HUMAN	QV2-BT0895-160400-143-H12 BT0835 Homo sapiens cDNA
1318	14353		0.88	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1321	14358		2.63	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
11528	24469		1.73	8.0E-55	AW408714.1	EST_HUMAN	fh02a02.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860907 5'
12390	25167		1.3	8.0E-55	BE327189.1	EST_HUMAN	hw08a006.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182315 3' similar to TR:Q8Z1J8
1083	14127	27081	1.52	7.0E-55	RO9348.1	EST_HUMAN	Yf26a04.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:127068 5' similar to SP-C661_BOVIN P10897 CYTOCHROME ;
9156	22122		1.54	7.0E-55	AW103838.1	EST_HUMAN	xd78a02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2803522 3' similar to TR:O60365
9636	22489	35947	1.22	7.0E-55	AA889581.1	EST_HUMAN	O60365 FOS38554_1.1 ;
9570	22532	35982	2.15	7.0E-55	ALJ38909.1	EST_HUMAN	ak28a11.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1407280 3'
11544	24485	38038	8.31	7.0E-55	AI591056.1	EST_HUMAN	AU139809 PLACE1 Homo sapiens cDNA clone PLACE1011578 5'
11544	24485	38039	8.31	7.0E-55	AI591056.1	EST_HUMAN	iq29f09.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2210249 3'
12135	25004		1.8	7.0E-55	H48714.1	EST_HUMAN	iq29f09.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2210249 3'
12968	25878		1.78	7.0E-55	H23396.1	EST_HUMAN	yq78a03.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201893 5'
11843	24728	38313	1.85	8.0E-55	AB040834.1	NT	ym57g07.t1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:52444 5'
1785	14814	27798	1.3	5.0E-55	AA704971.1	EST_HUMAN	Homo sapiens mRNA for KIAA1501 protein, partial cds
1785	14814	27798	1.3	5.0E-55	AA704971.1	EST_HUMAN	z65b09.s1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
6690	19747	33023	1.65	5.0E-55	4502240	NT	z65b09.s1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
6690	19747	33024	1.65	5.0E-55	4502240	NT	Homo sapiens erythrocyte E (chondrocyte) punctata 1 (APSE), mRNA
7237	20258	33592	0.69	5.0E-55	7382477	NT	Homo sapiens erythrocyte E (chondrocyte) punctata 1 (APSE), mRNA
7513	20478	33839	0.68	5.0E-55	11434422	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 5, mRNA
8327	21296	34711	0.74	5.0E-55	11528491	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
9399	22364	35786	2.57	5.0E-55	4506302	NT	Homo sapiens BCL2-associated athanogene (BAG1), mRNA
							Homo sapiens protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPR) mRNA

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9674	22627		1.9	5.0E-55	BE064388.1	EST_HUMAN	RC4-BT0310-110300-016-f10 BT0310 Homo sapiens cDNA
10397	23319	36801	1.31	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10397	23319	36802	1.31	6.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10582	23904	36887	1.2	5.0E-55	5453765	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
12419	25189		3.4	5.0E-55	11417872	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
57	15831	26088	1.49	4.0E-55	AW957894.1	EST_HUMAN	EST370064 MAGE resequences, MAGE Homo sapiens cDNA
673	13737	26884	31.1	4.0E-55	4826873	NT	752b10.x1 Scarsa_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3380043 3' similar to contains L1.13 L1 repetitive element;
1517	14549		1.97	4.0E-55	BF081411.1	EST_HUMAN	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2040	15059	28078	1.04	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2040	15059	28078	1.04	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2097	15114	28134	8.73	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2097	15114	28135	8.73	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2319	15330	28354	2.05	4.0E-55	4507794	NT	Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) mRNA
8887	21655		11	4.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11563	24503		2.89	4.0E-55	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
12335	25135		3.94	4.0E-55	BF303941.1	EST_HUMAN	601886575F2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4120338 5'
8761	19805	33088	0.78	3.0E-55	AA077156.1	EST_HUMAN	7B09A08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B09A08
12271	25093		1.91	3.0E-55	BE178519.1	EST_HUMAN	PM1-HT0803-090300-001-g08 HT0803 Homo sapiens cDNA
13007	25560		1.9	3.0E-55	AL163294.2	NT	Homo sapiens chromosome 21 segment HS21C084
377	13461	26391	2.24	2.0E-55	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
553	13623		1.59	2.0E-55	M10978.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
650	13716	26638	3.26	2.0E-55	4507286	NT	Homo sapiens syntaxin-binding protein 1 (STXB1) mRNA, and translated products
2870	16028	26951	1.02	2.0E-55	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
4808	17825	30721	2.19	2.0E-55	BE718986.1	EST_HUMAN	CMT-HT0876-150800-357-g03 HT0876 Homo sapiens cDNA
7747	25689	34067	0.69	2.0E-55	AW501988.1	EST_HUMAN	ULHF-BN0-aks-f-08-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078275 5'
9420	22385	35823	0.51	2.0E-55	BF224452.1	EST_HUMAN	hr76h08.x1 NCI_CGAP_K411 Homo sapiens cDNA clone IMAGE:3134463 3'
9420	22385	35824	0.51	2.0E-55	BF224452.1	EST_HUMAN	hr76h08.x1 NCI_CGAP_K411 Homo sapiens cDNA clone IMAGE:3134463 3'
9615	22478		6.16	2.0E-55	AI002836.1	EST_HUMAN	sm88h04.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:1884185 3' similar to contains THR.b2 THR repetitive element;
8596	22553		0.78	2.0E-55	BE007859.1	EST_HUMAN	QV0-BN0147-280400-213-g08 BN0147 Homo sapiens cDNA
10607	23529	37024	0.43	2.0E-55	AI439401.1	EST_HUMAN	h03h08.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140479 3'
11286	24246	37773	1.84	2.0E-55	AU116344.1	EST_HUMAN	AU116344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12113	24983	38584	1.51	2.0E-55	BE588059.1	EST_HUMAN	601507718F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3808076 5'
98	13212	28138	2.4	1.0E-55	4505080	NT	Homo sapiens mannose-6-phosphatase receptor (cation dependent) (M6PR) mRNA
191	13282	28218	93.01	1.0E-55	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabefief2) mRNA, complete cds
576	13645	28558	0.75	1.0E-55	AU28718.1	EST_HUMAN	cr85g09.x1 Scarses testis_NHT Homo sapiens cDNA clone IMAGE:1644160 3'
1162	14194	27146	4.22	1.0E-55	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1867	14988	27890	1.65	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867027 5'
1967	14988	27891	1.65	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867027 5'
2333	15344		3.95	1.0E-55	5803174	NT	Homo sapiens SMA3 (SMA3), mRNA
2345	15824	28378	1.31	1.0E-55	AF000980.1	NT	Homo sapiens testis-specific Testis Transcript Y 1 (TTY1) mRNA, partial cds
2524	15527	28548	52.04	1.0E-55	X13111.1	NT	Human mRNA for HLA-A11E, a MHC class I molecule (major histocompatibility complex)
2561	15562	28580	4.62	1.0E-55	AB007888.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
2561	15562	28581	4.62	1.0E-55	AB007888.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
2619	15617	28841	4.78	1.0E-55	L54057.1	NT	Homo sapiens CLP mRNA, partial cds
2801	15783	28811	0.98	1.0E-55	AB033046.1	NT	Homo sapiens mRNA for KIAA1219 protein, partial cds
3420	16468	28988	0.98	1.0E-55	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4015	17054	28955	4.23	1.0E-55	AL163287.2	NT	Homo sapiens chromosome 21 segment HS21C087
4323	17362	30238	1.08	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4762	17782		1.21	1.0E-55	NT7281.1	EST_HUMAN	yw44g03.r1 Scarses fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245620 5'
4865	17882	30789	1.79	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
4865	17882	30770	1.79	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
5177	18188	31063	1.3	1.0E-55	8823125	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20126), mRNA
5575	18671	31634	0.56	1.0E-55	AF119858.1	NT	Homo sapiens PRO1851 mRNA, complete cds
6402	19470	32718	7	1.0E-55	11433046	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6402	19470	32719	7	1.0E-55	11433046	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
7282	20015		0.66	1.0E-55	AF189420.1	NT	Homo sapiens F-box protein FBL4 (FBL4) mRNA, complete cds
8321	21280	34704	1.25	1.0E-55	11432884	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
8321	21280	34705	1.25	1.0E-55	11432884	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
8410	21379	34785	0.49	1.0E-55	11421649	NT	Homo sapiens SKAP65 homologue (SKAP-HOM), mRNA
8418	21387	34788	1.27	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
8418	21387	34787	1.27	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
11776	23831	37452	1.65	1.0E-55	U50850.1	NT	Human infant brain unknown product mRNA, complete cds
11795	23950	37471	1.68	1.0E-55	T10045.1	EST_HUMAN	seq1575 b4-HB3MA Ccl8-HAP-F1 Homo sapiens cDNA clone b4-HB3MA-COT8-HAP-F161 5' similar to similar to Chinese Hamster DHFR-coamplified protein mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11902	24783	38371	1.74	1.0E-55	10587821	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
7590	20551	33912	1.89	9.0E-56	BE378074.1	EST_HUMAN	601237702F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609552 5'
2743	15737	28753	6.5	7.0E-58	H18834.1	EST_HUMAN	Y62g03.r1 Soares adult brain N265-IB55Y Homo sapiens cDNA clone IMAGE:173044 5' similar to contains THR repetitive element:
7902	20845	34228	2.13	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA
7802	20845	34230	2.13	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA
1701	14731	27713	1.99	5.0E-56	AW99712.1	EST_HUMAN	RC3-BN0053-170200-011-h01 BN0053 Homo sapiens cDNA
9516	22479	35823	0.61	5.0E-56	AW015507.1	EST_HUMAN	UIH-B10p-asu-e-05-UJL.s1 NC1 CGAP_Sub2 Homo sapiens cDNA clone IMAGE:2710544 3'
10764	23878		1.7	5.0E-58	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
12507	25930	31309	5.41	5.0E-56	H55089.1	EST_HUMAN	CHR220038 Chromosome 22 exon Homo sapiens cDNA clone C22_55 5'
30	13150	28049	12.5	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
30	13150	28050	12.5	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
2719	15713	28730	4.9	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2719	15713	28731	4.9	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2823	13688	28516	3.69	4.0E-56	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
2843	15620	28844	1.16	4.0E-56	A1632488.1	EST_HUMAN	wb08r08.x1 NC1 CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305191 3' similar to SW:DCOR_MUSPA
2843	15620	28845	1.16	4.0E-56	A1632488.1	EST_HUMAN	P27119 ORNITHINE DECARBOXYLASE:
6387	19455	32700	5.85	4.0E-56	AF217508.1	NT	wb08r08.x1 NC1 CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305191 3' similar to SW:DCOR_MUSPA
6387	19455	32701	5.85	4.0E-56	AF217508.1	NT	P27119 ORNITHINE DECARBOXYLASE:
10872	23792	37293	3.94	4.0E-56	AF043349.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
11288	24220	37743	7.82	4.0E-56	A1498068.1	EST_HUMAN	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
11288	24220	37744	7.82	4.0E-56	A1498068.1	EST_HUMAN	Homo sapiens lymphocyte-specific protein 1 (LSP1) gene, LSP1-7 allele, partial cds
1345	14380	27949	1.74	3.0E-56	8924029	NT	tm65g12.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163046 3'
1779	14808	27794	0.99	3.0E-56	8912743	NT	tm65g12.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163046 3'
3142	16189	29109	1.83	3.0E-56	AA325826.1	EST_HUMAN	Homo sapiens hypothetical protein PRO1304 (PRO1304), mRNA
3142	16189	29110	1.83	3.0E-56	AA325826.1	EST_HUMAN	Homo sapiens 5'-3' exoribonuclease 2 (XRN2), mRNA
3847	16887		1.73	3.0E-56	AF055066.1	NT	EST28889 Cerebellum II Homo sapiens cDNA 5' end
3938	16978	28893	1.1	3.0E-56	BE393512.1	EST_HUMAN	EST28889 Cerebellum II Homo sapiens cDNA 5' end
4454	17480	30368	4.84	3.0E-56	AL163288.2	NT	Homo sapiens MHC class 1 region
4603	17624	30517	2.34	3.0E-56	5902085	NT	601310203F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631848 5'
4841	17858		1.81	3.0E-56	BE863572.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C068
							Homo sapiens superfamily viralicidic activity 2 (S. cerevisiae homolog) like (SKIV2L), mRNA
							601438154F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3923100 5'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5787	18859	32038	1.84	3.0E-56	4759163	NT	Homo sapiens sperc/osteonectin, cwcy and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
5787	18859	32039	1.84	3.0E-56	4759163	NT	Homo sapiens sperc/osteonectin, cwcy and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
7058	20080	33389	5.05	3.0E-56	11421124	NT	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), mRNA
9188	22134	35560	5	3.0E-56	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
10172	23097	36577	1.12	3.0E-56	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10846	23768	37265	1.63	3.0E-56	11434968	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
11843	24580	38147	4.57	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11843	24580	38148	4.57	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11883	24860	38455	7.15	3.0E-56	U46800.1	NT	Homo sapiens NACP/alpha-synuclein gene, exon 5
11883	24860	38456	7.15	3.0E-56	U46800.1	NT	Homo sapiens NACP/alpha-synuclein gene, exon 5
12378	25160	31812	2.99	3.0E-56	11434878	NT	Homo sapiens caveolin 3 (CAV3), mRNA
12378	25160	31813	2.99	3.0E-56	11434878	NT	Homo sapiens caveolin 3 (CAV3), mRNA
525	13596		1.92	2.0E-56	AA189818.1	EST_HUMAN	zfp52a08.s1 Stratigene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:845206 3'
734	15849	26732	2.02	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
734	15849	26733	2.02	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
2392	15400	28425	1.22	2.0E-56	M28001.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
2392	15400	28426	1.22	2.0E-56	M28001.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
3001	16059	28978	1.52	2.0E-56	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
9327	16878		1.71	2.0E-56	AB006681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3544	16880	28515	1.18	2.0E-56	AV703184.1	EST_HUMAN	AV703184 AD8 Homo sapiens cDNA clone ADBCFG10 5'
7287	20289	33604	1.24	2.0E-56	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
981	14032		1.28	1.0E-56	AF180830.1	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
3688	16731	29642	2.08	1.0E-56	AW589833.1	EST_HUMAN	hg23c11.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:2946452 3'
3688	16731	29643	2.08	1.0E-56	AW589833.1	EST_HUMAN	hg23c11.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:2946452 3'
5071	18081	30982	1.22	1.0E-56	AB05162.1	EST_HUMAN	QV-BT077-190189-079 BT077 Homo sapiens cDNA
6895	20121	33435	0.56	1.0E-56	AW60820.1	EST_HUMAN	MF3-ST0203-180100-208-H02 ST0203 Homo sapiens cDNA
10315	23239		0.81	1.0E-56	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21 C003
10408	23330	36815	1.82	1.0E-56	AW845987.1	EST_HUMAN	RC2-CT0163-220888-001-E02 CT0163 Homo sapiens cDNA
628	13691		2.17	9.0E-57	AW880885.1	EST_HUMAN	QV0-OT0033-070300-162-H03 OT0033 Homo sapiens cDNA
11554	24494	38050	1.51	9.0E-57	AF228407.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11554	24494	38051	1.51	9.0E-57	AF228407.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11850	24733	38320	2.23	9.0E-57	AB020881.1	NT	Homo sapiens mRNA for cyclin B2, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
14	13134	28032	1.11	8.0E-57	8823348	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
287	13391	28319	3.14	8.0E-57	AW818405.1	EST_HUMAN	QV4-ST0234-181189-037-05 ST0234 Homo sapiens cDNA
885	13940	28888	9.74	8.0E-57	AW284689.1	EST_HUMAN	xc05d10.x1 NCI_CGAP Bm53 Homo sapiens cDNA clone IMAGE:2760251 3' similar to gbcU05876
1833	14860	27858	2.19	8.0E-57	AA408109.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
4946	17882	30852	1.11	8.0E-57	4557630	NT	zc5f1b12.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757151 5'
5073	18083	30965	1.32	8.0E-57	BE288918.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, AMPA 4 (GRIA4) mRNA
5312	25849	31435	1.09	8.0E-57	11418185	NT	600944440F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860864 5'
6339	19601	32803	0.54	8.0E-57	AB020705.1	NT	Homo sapiens acornase 2, mitochondrial (ACO2), mRNA
6808	19698	32941	12.65	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0888 protein, partial cds
6808	19698	32942	12.65	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0880 protein, partial cds
7882	20640	34003	0.71	8.0E-57	7662263	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
8024	20661	34357	2.69	8.0E-57	AB020844.1	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
8024	20661	34358	2.69	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
10948	23708	37267	0.44	8.0E-57	11428710	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
11807	13134	28032	2.8	8.0E-57	8823349	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA
12088	24960	38567	1.67	8.0E-57	11431280	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
12733	25388	31751	3.29	8.0E-57	11545732	NT	Homo sapiens Ras suppressor protein 1 (RSU1), mRNA
12749	25396	31761	1.39	8.0E-57	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
3283	16317	29237	1.09	7.0E-57	7242158	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
3283	16317	29238	1.09	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3284	16338	29258	0.65	7.0E-57	8005979	NT	Homo sapiens NME7 (NME7), mRNA
3891	16631	29840	2.63	7.0E-57	AF012872.1	NT	Homo sapiens Kruppel-like factor 8 (KLF8), mRNA
3891	16631	29841	2.63	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
4816	17833	30731	1.03	7.0E-57	U11068.2	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
13075	25884		3.96	5.0E-57	AL271735.1	NT	Homo sapiens large conductance calcium- and voltage-dependent potassium channel alpha subunit (MaxK) mRNA, complete cds
3766	16808	29718	2.12	4.0E-57	AB028898.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
805	13863	20813	0.93	3.0E-57	4507788	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1334	14368		58.49	3.0E-57	AA230279.1	EST_HUMAN	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
2400	15407	28431	0.95	3.0E-57	AA348335.1	EST_HUMAN	nc13807.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:1008037 similar to SW-RS10_HUMAN
							P46783 40S RIBOSOMAL PROTEIN S10.;
							EST64770 Hippocampus II Homo sapiens cDNA 5' and

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2714	15708	28724	1.19	3.0E-57	BE676022.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3286443 3' similar to WP:Y47HBC.2 CE20283;
2714	15708	28725	1.19	3.0E-57	BE676022.1	EST_HUMAN	
3711	16764		28.47	3.0E-57	AW853984.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3286443 3' similar to WP:Y47HBC.2 CE20283;
6145	19220	32450	1.37	3.0E-57	11225808	NT	
6248	18319	32549	3.49	3.0E-57	BE798837.1	EST_HUMAN	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
8484	21452	34870	2.61	3.0E-57	W28130.1	EST_HUMAN	60158988F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3844302 5'
8510	21478	34891	1.9	3.0E-57		EST_HUMAN	425b Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8510	21478	34892	1.9	3.0E-57	11545788	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
8824	21592	35011	0.58	3.0E-57	11545788	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
8772	21739	35180	0.66	3.0E-57	11427757	NT	Homo sapiens KIAA0849 gene product (KIAA0849), mRNA
8210	22178	35608	4.85	3.0E-57	105282.1	NT	Human farnesyl pyrophosphate synthetase mRNA, complete cds
8605	22809	36060	0.7	3.0E-57	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
9805	22809	36061	0.7	3.0E-57	11545788	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
11254	24207	37729	2.98	3.0E-57	AW248374.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
12384	25851	31314	7.53	3.0E-57	W23871.1	EST_HUMAN	2820473 Spriome NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820473 5'
1500	14533	27604	1.05	2.0E-57	AF248219.1	NT	2b46d11.1 Soares fetal lung NBL-19W Homo sapiens cDNA clone IMAGE:306549 5'
1500	14533	27605	1.05	2.0E-57	AF248219.1	NT	Homo sapiens SNARE protein kinase SNARE mRNA, complete cds
3452	16498		2.19	2.0E-57	AL163204.2	NT	Homo sapiens SNARE protein kinase SNARE mRNA, complete cds
3582	16908	28629	0.65	2.0E-57	R07702.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
3582	16908	28630	0.65	2.0E-57	R07702.1	EST_HUMAN	ye88101.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
3951	16991	28907	0.86	2.0E-57	BE5073284.1	EST_HUMAN	ye88101.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
4538	17581	30448	8.89	2.0E-57	AL163283.2	NT	MRO-BT0551-060300-103-503 BT0551 Homo sapiens cDNA
5139	18148	31027	1.74	2.0E-57	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C083
5751	18845		1.67	2.0E-57	AA016131.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C006
6150	19225		32.23	2.0E-57	BF115286.1	EST_HUMAN	2a37c05.1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:380584 5' similar to contains L1.13 L1 repetitive element;
6283	19355	32591	0.7	2.0E-57	BF115286.1	EST_HUMAN	7180004.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3570886 3' similar to contains TAR1.11 MER22 repetitive element;
8978	21944	35368	1.02	2.0E-57	AF045452.1	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 22 (SCYA22), mRNA
10205	23130	36817	1.63	2.0E-57	AF057722.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
11601	24539	38097	1.88	2.0E-57	11424084	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exons 3 and 4
11601	24539	38098	1.88	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11601	24539	38098	1.88	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11642	24579	38145	1.74	2.0E-57	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
11642	24579	38146	1.74	2.0E-57	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
2240	16264	28278	1.49	1.0E-57	AW503208.1	EST_HUMAN	UHF-BN0-alk-g-0-0-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
9041	22007		4.47	1.0E-57	BE043031.1	EST_HUMAN	h32a08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3039062 3' similar to TR:O00246 O00246
12537	25261		3.65	1.0E-57	AW470761.1	EST_HUMAN	HYPOTHETICAL 9.3 KD PROTEIN ;
5760	18893	32033	1.01	9.0E-58	AA297847.1	EST_HUMAN	THR repetitive element ;
12795	25424	31738	2.37	9.0E-58	BE365061.1	EST_HUMAN	EST11348 Uterus Homo sapiens cDNA 5' end
591	13658		2.43	8.0E-58	BE868715.1	EST_HUMAN	601309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
655	13721	26844	2.84	8.0E-58	AJ786376.1	EST_HUMAN	601445948F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850211 5'
655	13721	26845	2.84	8.0E-58	AJ786376.1	EST_HUMAN	t34807.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475
1874	14898	27897	1.98	8.0E-58	11434921	NT	UNNAMED HERV-H PROTEIN ;
1874	14898	27898	1.98	8.0E-58	11434921	NT	UNNAMED HERV-H PROTEIN ;
2987	16045	33768	2.65	8.0E-58	7706132	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
7449	20415		0.95	7.0E-58	BE561971.1	EST_HUMAN	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
11203	24157		4.96	7.0E-58	5174542	NT	Homo sapiens DHHC1 protein (LOC51304), mRNA
11275	24227	37753	2.79	7.0E-58	AW504109.1	EST_HUMAN	601346704F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687577 5'
11275	24227	37754	2.79	7.0E-58	AW504109.1	EST_HUMAN	Homo sapiens MAD5 box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B) mRNA
2385	15393	28419	4.05	6.0E-58	AU130689.1	EST_HUMAN	UHF-BN0-alk-g-10-0-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078867 5'
2912	15970	28893	1.62	6.0E-58	BE242150.1	EST_HUMAN	UHF-BN0-alk-g-10-0-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078867 5'
2912	15970	28894	1.62	6.0E-58	BE242150.1	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001263 5'
6294	19366	32605	1.16	6.0E-58	AF108911.1	NT	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylar-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
10672	23594	37091	1.02	6.0E-58	11434746	NT	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylar-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
12629	25316		1.41	6.0E-58	11526281	NT	sapiens cDNA clone TCAAP1219
300	13394	26321	4.35	5.0E-58	4507334	NT	Homo sapiens chemokine MIP-2 gamma (MIP-2 gamma) mRNA, complete cds
711	13773	26707	7.63	5.0E-58	BE763984.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
1199	14239	27195	3.77	5.0E-58	AW797948.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
1199	14239	27196	3.77	5.0E-58	AW797948.1	EST_HUMAN	Homo sapiens synaptophysin 1 (SYNJ1), mRNA
							RC4-NT0057-160800-016-005 NT0057 Homo sapiens cDNA
							CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
							CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1200	14239	27195	3.1	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-607 UM0043 Homo sapiens cDNA
1200	14239	27196	3.1	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-607 UM0043 Homo sapiens cDNA
3334	16385	28306	3.85	5.0E-58	AA988183.1	EST_HUMAN	cr88e07.s1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1603908 3'
4287	17316	30195	0.95	5.0E-58	AI635745.1	EST_HUMAN	ts88e07.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2238468 3' similar to SW:PRO2_ACACA
5710	18804		2.2	5.0E-58	11486282	NT	P-18984 PROFILIN II;
6302	18873	32812	5.97	5.0E-58	H22072.1	EST_HUMAN	Homo sapiens placenta-specific 1 (PLAC1), mRNA
6334	18697	32860	0.94	5.0E-58	AL163285.2	NT	ym51h07.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:52071 5'
6615	18673	32851	1.16	5.0E-58	11421330	NT	Homo sapiens chromosome 21 segment HS21C085
6945	20169	33482	0.7	5.0E-58	AF051334.1	NT	Homo sapiens apical protein, Xenopus laevis-like (APXL), mRNA
6945	20169	33483	0.7	5.0E-58	AF051334.1	NT	Homo sapiens ribitin (NBS) mRNA, complete cds
7313	20284	33825	0.8	5.0E-58	4885400	NT	Homo sapiens ribitin (NBS) mRNA, complete cds
8302	21271	34683	7.52	5.0E-58	8922693	NT	Homo sapiens holochochrome c synthase (cytochrome c heme-lyase) (HCCS) mRNA
8636	21684	36088	0.79	5.0E-58	AB048837.1	NT	Homo sapiens hypothetical protein FLJ10828 (FLJ10828), mRNA
8635	22848	36103	1.34	5.0E-58	5231227	NT	Homo sapiens mRNA for KIAA1617 protein, partial cds
8835	22848	36104	1.34	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
10216	23141	36628	1.01	5.0E-58	11430647	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
10482	23404	36901	1.86	5.0E-58	AL193218.2	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prp18 (PRP18), mRNA
10768	23687	37183	0.51	5.0E-58	AB014511.1	NT	Homo sapiens chromosome 21 segment HS21C018
10768	23687	37184	0.51	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
12352	26878		2.17	5.0E-58	11526293	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
12791	26904		1.48	5.0E-58	11428423	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
13015	25566		2.08	5.0E-58	11418177	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
373	13469	26388	1.85	4.0E-58	4502302	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
797	13856	26803	1.42	4.0E-58	4504634	NT	Homo sapiens ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit (digenomycin sensitivity conferring protein) (ATP5O) mRNA
1464	14487	27471	1.14	4.0E-58	4503648	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
2839	15638	28661	2.02	4.0E-58	U96251.1	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
3336	16387	29308	1.11	4.0E-58	D18470.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 3
3753	16796	29708	1.02	4.0E-58	5031660	NT	Human mRNA, Xq terminal portion
8120	21057	34454	0.69	4.0E-58	BE463857.1	EST_HUMAN	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
11671	24607	36184	7.52	4.0E-58	11424059	NT	hy18a02.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:3167642 3'
335	13424		0.94	3.0E-58	R17879.1	EST_HUMAN	Homo sapiens E1B-65kDa-associated protein 5 (E1B-AP5), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1390	14424	27393	2.32	3.0E-58	4768081	NT	Homo sapiens peptide YY (PYY) mRNA
3193	16246	29185	2.57	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4306943 5'
3193	16248	29188	2.57	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4306943 5'
6390	19458	32703	0.61	3.0E-58	BE089508.1	EST_HUMAN	QV0-BT0702-170400-194-08 BT0702 Homo sapiens cDNA
6587	19647	32916	0.79	3.0E-58	F07056.1	EST_HUMAN	HSC1T0081 normalized infant brain cDNA Homo sapiens cDNA clone c-1q08
6787	19851	33136	3.82	3.0E-58	AV712977.1	EST_HUMAN	AV712977 DCA Homo sapiens cDNA clone DCAAZG04 5'
939	13892	26944	8.85	2.0E-58	AF088624.1	NT	Homo sapiens 5-aminolevulinic acid synthase 2 (ALAS2) gene, complete cds
							ba08607.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823733 5' similar to gb:268391 60S RIBOSOMAL PROTEIN L8 (HUMAN); gb:2681987 M.musculus mRNA for TAX responsive element binding protein (MOUSE);
1294	14329		8.41	2.0E-58	BE208632.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:2567704 3'
5409	18512	31380	0.75	2.0E-58	AW074831.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
5431	25038	31413	3.25	2.0E-58	BE907188.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
5431	25038	31441	3.25	2.0E-58	BE907188.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
6175	18250	32483	1.09	2.0E-58	BF513488.1	EST_HUMAN	U1H-BW1-ems-g-11-0-Jul.st NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071060 3'
							em57e02.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1639874 3' similar to WP-ZK328.1 CE06065 UBQUITIN CONJUGATING ENZYME1; RECOVERIN SUBFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;
6244	19317	32547	1.85	2.0E-58	A124874.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
6278	19350	32584	0.83	2.0E-58	R92667.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
7112	20046	33348	0.83	2.0E-58	A1291407.1	EST_HUMAN	601498981F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3801911 5'
7364	20324	33683	2.68	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7364	20334	33684	2.68	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
11093	24053	37578	18.24	2.0E-58	BF307745.1	EST_HUMAN	601890812F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131881 5'
11312	24282	37788	1.48	2.0E-58	AW872641.1	EST_HUMAN	601890812F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131881 5'
723	13785	26719	0.68	1.0E-58	M85134.1	NT	Human complement component C5 mRNA, 3' end
1069	14114	27064	5.86	1.0E-58	6274549	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22) (NDUFB9), mRNA
1330	14365	27333	2.03	1.0E-58	AW957182.1	EST_HUMAN	EST368252 MAGC resequences, MAGD Homo sapiens cDNA
1330	14365	27334	2.03	1.0E-58	AW957182.1	EST_HUMAN	EST368252 MAGC resequences, MAGD Homo sapiens cDNA
1397	14431	27400	0.98	1.0E-58	AJ238983.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1672	14704	27681	0.95	1.0E-58	BE466132.1	EST_HUMAN	hy1008.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:3186635 3'
2514	15808	28825	1.21	1.0E-58	4759169	NT	Homo sapiens steroid regulatory element binding transcription factor 2 (SREBF2) mRNA
3548	16594	29520	1.19	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3548	16594	29521	1.19	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3733	16775	29687	0.7	1.0E-58	4507628	NT	Homo sapiens transition protein 1 (during histone to protamine replacement) (TNPI1) mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5008	18020	30808	5.17	1.0E-58	AI41063.1	EST_HUMAN	ca3h01.x1 Soares_NhrMPu_S1 Homo sapiens cDNA clone IMAGE:1678129 3'
5041	19027	32221	1.18	1.0E-58	BE061860.1	EST_HUMAN	RC1-BT0254-280100-015-e01 BT0254 Homo sapiens cDNA
7048	20068	33374	0.94	1.0E-58	11422031	NT	Homo sapiens hypothetical protein (LOC51280), mRNA
8451	21420		0.5	1.0E-58	AW979337.1	EST_HUMAN	EST385637 MAGE resequences, MAGM Homo sapiens cDNA
8221	22187	35619	0.58	1.0E-58	4505314	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
8333	22298	35727	0.94	1.0E-58	AV761001.1	EST_HUMAN	AV751001 NPC Homo sapiens cDNA clone NPCACH08 5'
8436	22400	35837	0.56	1.0E-58	AA412397.1	EST_HUMAN	289705.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'
8436	22400	35838	0.55	1.0E-58	AA412397.1	EST_HUMAN	289705.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'
10548	23468	36863	0.58	1.0E-58	11432004	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
12069	24942		2.61	1.0E-58	X63382.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
2238	16252	28276	21.08	8.0E-59	4507378	NT	Homo sapiens TATA box binding protein (TBP) mRNA
7016	20141	33468	0.71	8.0E-59	AA382291.1	EST_HUMAN	EST186683 Testis 1 Homo sapiens cDNA 5' end
7015	20141	33459	0.71	8.0E-59	AA382291.1	EST_HUMAN	EST186683 Testis 1 Homo sapiens cDNA 5' end
8821	21489	34804	3.74	8.0E-59	A1761963.1	EST_HUMAN	wh50d08.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384171 3'
179	16834		3.9	6.0E-59	BF035327.1	EST_HUMAN	601458331F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
8151	21089	34489	1.64	6.0E-59	AA962431.1	EST_HUMAN	cm81a04.st1 NCL CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1653550 3' similar to TR-Q13732 Q13732 SA GENE PRODUCT PRECURSOR.;
8688	21556	34972	0.56	6.0E-59	A1760870.1	EST_HUMAN	cm08h02.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cm08h02 random
1768	14797	27762	1.19	5.0E-59	AW157281.1	EST_HUMAN	au53h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to TR:075788 075788 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
1768	14797	27763	1.19	5.0E-59	AW157281.1	EST_HUMAN	au53h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to TR:075788 075788 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
3144	16201	28112	7.03	5.0E-59	A1807484.1	EST_HUMAN	wf49c11.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2368838 3'
4687	17708	30601	7.38	5.0E-59	X83497.1	NT	H. sapiens DNA for ZNF80-linked ERV9 long terminal repeat
5796	18888	32070	0.58	5.0E-59	6005698	NT	Homo sapiens atadn 2 related protein (A2LP), mRNA
7182	18413	31215	7.91	5.0E-59	AW162304.1	EST_HUMAN	au58c07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781228 3' similar to contains element TAR1 repetitive element.;
9158	22124	35553	0.95	5.0E-59	11421778	NT	Homo sapiens polymerase (RNA) III (DNA directed) (38kD) (RPF38), mRNA
10063	22890	36459	1.94	5.0E-59	AV762869.1	EST_HUMAN	AV762869 MDS Homo sapiens cDNA clone MDSEIC12 5'
11253	24206	37728	3.1	5.0E-59	11434808	NT	Homo sapiens hypothetical protein (LOC57143), mRNA
794	13853	26801	3.22	4.0E-59	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
1242	14278	27239	0.75	4.0E-59	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, end translated products

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1242	14278	27240	0.75	4.0E-59	4506818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIPSK2B) mRNA, and translated products
5615	18711	31889	1.04	4.0E-59	11034810	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
12107	24977	38576	1.8	4.0E-59	7687428	NT	Homo sapiens origin recognition complex, subunit 6 (yeast homolog)-like (ORC6L), mRNA
12492	25810		2.98	4.0E-59	AF057720.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
10	13130		6.8	3.0E-59	AW986524.1	EST_HUMAN	EST377582 MAGE resequences, MAGI Homo sapiens cDNA
228	19327	28250	4.47	3.0E-59	7682247	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
1723	14753	27738	11.42	3.0E-59	4505880	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
1723	14753	27739	11.42	3.0E-59	4506880	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
2139	15158	28171	6.05	3.0E-59	AB028035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
2139	15158	28172	6.05	3.0E-59	AB028035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
3146	16203	29116	2.91	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3146	16203	29117	2.91	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3838	16878	28781	1.28	3.0E-59	4508044	NT	Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2) mRNA
4712	17732	30628	1.4	3.0E-59	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4878	17895	30785	1.66	3.0E-59	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPR1), mRNA
5091	18101		1.05	3.0E-59	M85861.1	NT	Human prothrombin converting enzyme (NEC2) gene, exon 2
6346	19415	32658	1.98	3.0E-59	8924074	NT	Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA
7694	20546	33808	2.12	3.0E-59	6454137	NT	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
8263	21232	34642	1.5	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
8263	21232	34643	1.5	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
10404	23328	36809	0.84	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
10404	23328	36810	0.84	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
12470	25219		1.37	3.0E-59	11417888	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
12612	26311		7.97	3.0E-59	11417888	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
5885	19070	32288	0.82	2.0E-59	BF508383.1	EST_HUMAN	UIH-B14-eyb-b-02-Q1.s1 NCJ CGAP Sub8 Homo sapiens cDNA clone IMAGE:3088522 3'
5885	19070	32289	0.82	2.0E-59	BF508383.1	EST_HUMAN	UIH-B14-eyb-b-02-Q1.s1 NCJ CGAP Sub8 Homo sapiens cDNA clone IMAGE:3088522 3'
6979	20202		0.61	2.0E-59	AA470073.1	EST_HUMAN	z88005.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:790377 3'
7272	20007	35307	0.57	2.0E-59	AF135187.1	NT	Homo sapiens interferon-induced protein p78 (MX1) gene, complete cds
8082	21019		0.52	2.0E-59	BF373328.1	EST_HUMAN	MRO-F10144-280700-002-rt10 F10144 Homo sapiens cDNA
8995	22822		4.8	2.0E-59	AA309774.1	EST_HUMAN	EST180633 Jurkat T-cells V Homo sapiens cDNA 5' end
10893	23813		1.55	2.0E-59	BF365554.1	EST_HUMAN	RC0-NT0038-100700-032-e07 NT0038 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11180	24136	37687	2.34	2.0E-69	AW410698.1	EST_HUMAN	ff07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861854 5'
11180	24136	37688	2.34	2.0E-69	AW410698.1	EST_HUMAN	ff07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861854 5'
12373	25158	31857	6.98	2.0E-69	A631809.1	EST_HUMAN	wa39c12.x1 NCI_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2300182 3' similar to TR-Q186542
12884	25836	31428	4.02	2.0E-69	L11645.1	NT	Q88542 RTVL-H PROTEIN, contains LTR7 b1 LTR7 repetitive element;
184	13287		18.92	1.0E-69	BE296411.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
2625	15624		3.89	1.0E-59	AA748468.1	EST_HUMAN	601176757F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531927 5'
7812	20761	34137	1.18	1.0E-59	AJ130894.1	NT	oa56h11.x1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1308029 3' similar to TR-Q13597
7988	20825	34319	1.07	1.0E-59	BE256814.1	EST_HUMAN	Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE.;
7988	20825	34320	1.07	1.0E-59	BE256814.1	EST_HUMAN	601111951F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3352682 5'
9740	22768	36222	0.85	1.0E-59	11419830	NT	601111951F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3352682 5'
9863	22890	36351	0.54	1.0E-59	11428849	NT	Homo sapiens zinc finger protein 275 (ZNF275), mRNA
9863	22890	36352	0.54	1.0E-59	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
11201	20761	34137	0.85	1.0E-59	AJ130894.1	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
764	13824	26768	2.28	8.0E-60	AW677945.1	EST_HUMAN	Homo sapiens mRNA for transcription factor
1467	14500	27474	2.85	8.0E-60	4759159	NT	EST389849 MAG2 resequences, MAGO Homo sapiens cDNA
2182	15197	28217	2.65	8.0E-60	5174656	NT	Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18kD) (SNRPD3) mRNA
2182	15197	28218	2.66	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
6084	19173	32389	0.94	8.0E-60	AB028004.1	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
6653	19710	32987	1.01	8.0E-60	S83182.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7982	20803	34285	0.99	8.0E-60	11420841	NT	hyaluronan-binding protein-hepatocyte growth factor activator homolog [human, plasma, mRNA, 2408 nt]
8298	21257	34679	2.37	8.0E-60	X17033.1	NT	Homo sapiens phosphatidylcytochrome transferase 1, choline, beta isoform (PCYT1B), mRNA
8298	21257	34687	2.88	8.0E-60	11428949	NT	Human mRNA for integrin alpha-2 subunit
9826	22676	36130	1.2	8.0E-60	11417118	NT	Homo sapiens S-antigen; retina and pineal gland (arrestin) (SAG), mRNA
9826	22676	36131	1.2	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10638	23869	37373	0.66	8.0E-60	5453997	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
11182	24138	37670	4.65	8.0E-60	AL163204.2	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
11182	24138	37671	4.65	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
755	13816	26760	30.34	7.0E-60	AF055096.1	NT	Homo sapiens chromosome 21 segment HS21C004
758	13816	26760	69.13	7.0E-60	AF055096.1	NT	Homo sapiens MHC class 1 region
816	13874	26822	1.17	7.0E-60	4504634	NT	Homo sapiens MHC class 1 region
2138	15155	28170	1.04	7.0E-60	AF077188.1	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
							Homo sapiens cullin 4A (CUL4A) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2796	15788	28806	1.18	7.0E-60	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
4208	17237	30124	3.1	7.0E-60	4505488	NT	Homo sapiens ornithine decarboxylase 1 (ODC1) mRNA
4608	17627	30519	0.72	7.0E-60	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
9792	22703	30161	3.69	7.0E-60	H68041.1	EST_HUMAN	Yr1204.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
11692	24657	38235	1.57	7.0E-60	H58041.1	EST_HUMAN	Yr1204.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
2189	15204	28224	1.01	6.0E-60	BE964974.2	EST_HUMAN	601658761R1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3680089 3'
8196	21084	34493	0.68	6.0E-60	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H_GS165L15.1), mRNA
8780	21747		8.33	6.0E-60	H52458.1	EST_HUMAN	Yq78100.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201863 5' similar to contains OFR repetitive element;
84	13200	26123	1.13	5.0E-60	AI807917.1	EST_HUMAN	Wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
84	13200	26124	1.13	5.0E-60	AI807917.1	EST_HUMAN	Wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
2244	16268	28284	1.25	4.0E-60	AW503208.1	EST_HUMAN	U1-HF-BNO-akt-g-07-Q-UL1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3078348 5'
2244	16268	28285	1.25	4.0E-60	AW503208.1	EST_HUMAN	U1-HF-BNO-akt-g-07-Q-UL1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3078348 5'
2384	18042		1.31	4.0E-60	AA289037.1	EST_HUMAN	EST11498 Uterus Homo sapiens cDNA 5' end similar to similar to retrovirus-related pol
7576	20538	33897	0.91	4.0E-60	BF196068.1	EST_HUMAN	h6105.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
9482	22446		0.59	4.0E-60	AL163278.2	NT	Q61085 GTP-RHO BINDING PROTEIN 1;
11628	24566	38127	1.7	4.0E-60	11433597	NT	Homo sapiens chromosome 21 segment HS21C078
11628	24566	38128	1.7	4.0E-60	11433597	NT	Homo sapiens v-ras-1 murine leukemia viral oncogene homolog 1 (RAF1), mRNA
1876	14901	27900	4.44	3.0E-60	BE562611.1	EST_HUMAN	Homo sapiens v-ras-1 murine leukemia viral oncogene homolog 1 (RAF1), mRNA
1876	14901	27901	4.44	3.0E-60	BE562611.1	EST_HUMAN	601338446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3680395 5'
1885	14910		1.88	3.0E-60	6031190	NT	601338446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3680395 5'
4485	17510	30398	2.27	3.0E-60	AJ271735.1	NT	Homo sapiens protein (PHB) mRNA
5482	18554	31485	2.11	3.0E-60	BF365143.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
5724	18618	31997	2.11	3.0E-60	AW830186.1	EST_HUMAN	QV4-NN1149-250900-423-401 NN1149 Homo sapiens cDNA
7143	18375	31263	0.95	3.0E-60	A1782814.1	EST_HUMAN	RC3-LT0023-200100-012-601 LT0023 Homo sapiens cDNA
8745	21713	35135	5.22	3.0E-60	5174844	NT	o60111.1 y6 NCL CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1834053 5' similar to SW:UDP_MOUSE
8745	21713	35136	5.22	3.0E-60	5174844	NT	P52624 URIDINE PHOSPHORYLASE;
8745	21713	35136	5.22	3.0E-60	5174844	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
8930	21806	35324	0.58	3.0E-60	A1040235.1	EST_HUMAN	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
9094	22060	35485	4.2	3.0E-60	5174844	NT	o656d08.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1680337 3' similar to SW:FORM_MOUSE Q05860 FORMIN;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10017	22844	38411	0.42	3.0E-60	BF102612.1	EST_HUMAN	601846227F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3930890 5'
12970	25871		1.53	3.0E-60	AA485286.1	EST_HUMAN	ab07604.r1 Stragelene lung (#837210) Homo sapiens cDNA clone IMAGE:940151 5' similar to contains LTR10.H1 LTR10 repetitive element;
33	13153	26054	1.7	2.0E-60	AY008295.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
1421	14454	27428	2.70	2.0E-60	Z11094.1	NT	H. sapiens 41kDa protein kinase related to rat ERK2
1734	14784	27747	1.34	2.0E-60	M24603.1	NT	Human bcr protein mRNA, 5' end
1743	14773	27758	1.01	2.0E-60	AY008295.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
2492	15495	28520	1.76	2.0E-60	AW380450.1	EST_HUMAN	RC1-17T0268-031289-012-402 HT0268 Homo sapiens cDNA
2614	15612	28637	1.38	2.0E-60	7657229	NT	Homo sapiens interleukin 17 receptor (IL17R), mRNA
2721	15715	28733	0.94	2.0E-60	AW978005.1	EST_HUMAN	EST380114 IMAGE sequences, MAGO Homo sapiens cDNA
3592	16637	28557	1.49	2.0E-60	4757867	NT	Homo sapiens v-rat murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
3835	16875	28689	0.83	2.0E-60	AF281919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4151	17182		0.65	2.0E-60	BF513458.1	EST_HUMAN	UHL-BW1-arnu-o-05-0-JL.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070952 3'
6433	19499	32752	0.9	2.0E-60	AI791952.1	EST_HUMAN	nr01f12.y5 NCI_CGAP_C08 Homo sapiens cDNA clone IMAGE:1078495 5' similar to contains THR.H1 THR repetitive element;
6840	19898	32974	1.49	2.0E-60	AF004877.1	NT	Homo sapiens pro-alpha 2(I) collagen (COL1A2) gene, complete cds
6874	19927	33224	0.92	2.0E-60	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
7027	18359	31279	2.05	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
7027	18359	31280	2.05	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
7317	20288	33630	6.6	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prothymosin, alpha
7317	20288	33631	6.6	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prothymosin, alpha
7434	20401	33755	0.53	2.0E-60	AI308124.1	EST_HUMAN	fb23d09.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2055185 3' similar to SW:GALR_RAT
7894	20837		1.06	2.0E-60	BF512808.1	EST_HUMAN	Q62805 GALANIN RECEPTOR;
8338	21307	34722	1.09	2.0E-60	X85597.1	EST_HUMAN	UHL-BW1-arnu-o-02-0-JL.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071210 3'
9219	22195	35818	4.86	2.0E-60	L36033.1	NT	HS15BEST human adult testis Homo sapiens cDNA clone CAM_EST15
10337	23261	36740	2.2	2.0E-60		NT	Human pre-B cell stimulating factor homologue (SDF1b) mRNA, complete cds
10337	23261	36741	2.2	2.0E-60		NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semasporthin) 6A (SEMA6A), mRNA
12094	24965	38561	1.9	2.0E-60	AW751191.1	EST_HUMAN	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semasporthin) 6A (SEMA6A), mRNA
12094	24965	38562	1.9	2.0E-60	AW751191.1	EST_HUMAN	CM0-CT0013-280693-017-403 CT0013 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12647	26330		1.38	2.0E-60	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae) like 1 (NHP2L1), mRNA
12771	26300		1.82	2.0E-60	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12773	26411		6.84	2.0E-60	11418068	NT	Homo sapiens similar to HSPC022 protein (H. sapiens) (LOC833504), mRNA
12789	26421		2.36	2.0E-60	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
528	13604	26512	0.97	1.0E-60	BE178588.1	EST_HUMAN	PM3-HT0605-270200-001-c08 HT0605 Homo sapiens cDNA
3920	16960	26873	1.46	1.0E-60	AU143389.1	EST_HUMAN	AU143389 Y79AA1 Homo sapiens cDNA clone Y79AA1001854 5'
4983	18008	30896	1.34	1.0E-60	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
8280	21249	34661	0.98	1.0E-60	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-H06 BT0311 Homo sapiens cDNA
9108	22074		3.08	1.0E-60	AA244041.1	EST_HUMAN	nc04e12.11 NC1_CGAP_P1 Homo sapiens cDNA clone IMAGE:1007182 similar to contains L1.1 L1 repetitive element;
9134	22100	35526	1.38	1.0E-60	AY754081.1	EST_HUMAN	AV754081 TP Homo sapiens cDNA clone TPGAED05 5'
1101	14145	27095	1.85	9.0E-61	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
9081	22027	35450	0.46	9.0E-61	4885546	NT	Homo sapiens PHD finger protein 2 (PHF2) mRNA
9061	22027	35451	0.46	9.0E-61	4885546	NT	Homo sapiens PHD finger protein 2 (PHF2) mRNA
2678	15674	28694	1.17	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NC1_CGAP_C03 Homo sapiens cDNA clone IMAGE:2506555 3'
2678	15674	28695	1.17	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NC1_CGAP_C03 Homo sapiens cDNA clone IMAGE:2506555 3'
2682	16020		1.66	8.0E-61	X57147.1	NT	Human endogenous retrovirus pHE-1 (ERV9)
8227	21196	34604	0.73	8.0E-61	AA586398.1	EST_HUMAN	nm59008.s1 NC1_CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088218 3'
11928	24807	38400	1.47	8.0E-61	HT1225.1	EST_HUMAN	ye12a09.11 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:214600 5' similar to SP-C40H1.1 CE00109 OVARIAN PROTEIN ;
11928	24807	38401	1.47	8.0E-61	HT1225.1	EST_HUMAN	ye12a09.11 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:214600 5' similar to SP-C40H1.1 CE00109 OVARIAN PROTEIN ;
128	13234	26163	0.67	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
128	13234	26164	0.67	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
265	13361	26285	2.61	6.0E-61	BE409310.1	EST_HUMAN	601300838F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
812	13670	26819	2.17	6.0E-61	BE409310.1	EST_HUMAN	601300838F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1324	14359	27326	13.5	6.0E-61	AF118880.1	NT	Homo sapiens PRO2014 mRNA, complete cds
1634	14688	27642	0.9	6.0E-61	BE257400.1	EST_HUMAN	601108233F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350145 5'
1655	14687	27682	2.32	6.0E-61	AA596033.1	EST_HUMAN	nm68109.s1 NC1_CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088897 3'
2137	15154	26169	0.91	6.0E-61	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
3317	16370	29290	8.07	6.0E-61	AU130689.1	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001263 5'
6147	19222	32452	3.08	6.0E-61	S78249.1	NT	Ig-beta/B29-CD79b (alternatively spliced) [human, B cells, mRNA Partial, 375 nt]
7565	20528	33887	1.53	6.0E-61	U24498.1	NT	Human autosomal dominant polycystic kidney disease protein 1 (PKD1) gene

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7878	20822	34189	1.87	6.0E-61	AF035737.1	NT	Homo sapiens general transcription factor 2-1 (GTF2) mRNA, complete cds
221	19321	26246	1.14	5.0E-61	8822980	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
221	19321	26247	1.14	5.0E-61	8822980	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
1688	14718	27639	3.18	5.0E-61	4508008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3049	16106	28020	1.98	5.0E-61	AL183279.2	NT	Homo sapiens chromosome 21 segment HS21C079
4009	17045		1.87	5.0E-61	AJ228041.1	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22; segment 1/3
1774	14803	27788	1.17	4.0E-61	AU140307.1	EST_HUMAN	AU140307 PLACE2 Homo sapiens cDNA clone PLACE2000302 5'
5913	18989	32190	0.51	4.0E-61	7661637	NT	Homo sapiens DKFZP6888023 protein (DKFZP6888023), mRNA
12348	25143		2.27	4.0E-61	AV731140.1	EST_HUMAN	AV731140 HTF Homo sapiens cDNA clone HTFAR801 5'
8764	21731	35154	0.65	3.0E-61	AF150180.1	EST_HUMAN	AF150180 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDAG804
489	13571	26493	1.74	2.0E-61	8822829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
1217	14255	27213	3.4	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
1217	14255	27214	3.4	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
1674	14706	27684	1.34	2.0E-61	N63039.1	EST_HUMAN	y63d111.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:246453 3' similar to
2649	15646		1.25	2.0E-61	N93937.1	EST_HUMAN	gbL25444 80S RIBOSOMAL PROTEIN L35A (HUMAN);
6586	18628	32891	0.92	2.0E-61	11426168	NT	y03f11.1 Soares melanocyte 2Nblm Homo sapiens cDNA clone IMAGE:270189 5'
9369	22334	35785	1.07	2.0E-61	AV684317.1	EST_HUMAN	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/118kD) (ATP8N1A), mRNA
9920	22741		1.27	2.0E-61	AB011108.1	NT	AV684317 GKc Homo sapiens cDNA clone GKCELG08 5'
10282	23207	36882	1.61	2.0E-61	AW500258.1	EST_HUMAN	Homo sapiens mRNA for KIAA0538 protein, partial cds
10612	23534	37031	2.88	2.0E-61	11421778	NT	U1-HF-BNO-aid-f-12-Q-U1.1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3076774 5'
11230	24183		6.91	2.0E-61	11419729	NT	Homo sapiens polymerase (RNA) III (DNA directed) (39kD) (RPC39), mRNA
13042	25583	31701	1.39	2.0E-61	AW985328.1	EST_HUMAN	Homo sapiens ribosomal protein L44 (RPL44), mRNA
435	13509		1.85	1.0E-61	AL163203.2	NT	QV0-BN0042-170300-162-f10 BN0042 Homo sapiens cDNA
774	13633	26779	0.96	1.0E-61	5453329	NT	Homo sapiens chromosome 21 segment HS21C003
1784	14813		0.95	1.0E-61	U32657.1	NT	Homo sapiens origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L) mRNA
1875	14900	27699	4.69	1.0E-61	6006983	NT	Human polymorphic trinucleotide repeat in X-linked retinitis pigmentosa (RP3) gene region
2206	15221	28241	1.52	1.0E-61	AW827281.1	EST_HUMAN	Homo sapiens zona pellucida glycoprotein 3A (sparm receptor) (ZP3A), mRNA
2846	15006	28831	1.58	1.0E-61	BE386363.1	EST_HUMAN	xxn11508.yt NCI CGAP_L15 Homo sapiens cDNA clone IMAGE:2683368 5' similar to contains element
3387	16436	26363	0.87	1.0E-61	7662319	NT	MSR1 repetitive element ;
4288	17317	30188	1	1.0E-61	M68840.1	NT	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614667 5'
4468	17494	30381	1.02	1.0E-61	4768249	NT	Homo sapiens KIAA0808 gene product (KIAA0808), mRNA
							Human monomamine oxidase A (MAOA) mRNA, complete cds
							Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4488	17494	30382	1.02	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NIKB activator (TANK) mRNA
4883	17910	30799	9.18	1.0E-61	AW288181.1	EST_HUMAN	UHHWO-ef-b-08-0-UI.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:2732871 3'
4883	17910	30800	9.18	1.0E-61	AW288181.1	EST_HUMAN	UHHWO-ef-b-08-0-UI.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:2732871 3'
4971	17986	30876	0.94	1.0E-61	7705898	NT	Homo sapiens flavohemoglobin b5-H5R (LOC51167), mRNA
4971	17986	30877	0.94	1.0E-61	7705898	NT	Homo sapiens flavohemoglobin b5-H5R (LOC51167), mRNA
5467	18569	31479	0.68	1.0E-61	M76423.1	NT	H. sapiens carbonic anhydrase VII (CA VII) gene, exons 4,5,6, and 7, and complete cds
5773	18865	32046	0.74	1.0E-61	7682303	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
5884	19069	32287	1.02	1.0E-61	11416881	NT	Homo sapiens survival of motor neuron 1, telomeric (SMN1), mRNA
7085	20019	33321	7.63	1.0E-61	M30135.1	NT	Human P40 T-cell and mast cell growth factor (hP40) gene, complete cds
7288	20270	33805	0.95	1.0E-61	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP128), mRNA
7387	20365	33717	1.58	1.0E-61	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
7397	20365	33718	1.58	1.0E-61	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8471	21440	34859	4.16	1.0E-61	11034840	NT	Homo sapiens growth hormone releasing hormone (GHRH), mRNA
8656	21624	35044	3.41	1.0E-61	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9837	22581		2.94	1.0E-61	AW999728.1	EST_HUMAN	MRO-BN0070-040400-010-H01 BN0070 Homo sapiens cDNA
9712	22666	36122	0.99	1.0E-61	11416280	NT	Homo sapiens cadherin 18 (CDH18), mRNA
10389	23311	36790	5.58	1.0E-61	11428882	NT	Homo sapiens KIAA0871 protein (KIAA0871), mRNA
10988	23964	37488	3.38	1.0E-61	11425578	NT	Homo sapiens actinin, alpha 4 (ACTN4), mRNA
11681	24597		3.53	1.0E-61	BE439409.1	EST_HUMAN	HTM1-025F1 HTM1 Homo sapiens cDNA
12283	25846	31433	4.15	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12283	25846	31434	4.15	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12852	25335	31761	23.14	1.0E-61	M20809.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr1) variable region (subgroup V kappa I)
12942	25521	31711	10.09	1.0E-61	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
10722	23644	37137	2.13	9.0E-62	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
4681	17603	30500	1.04	8.0E-62	AA830420.1	EST_HUMAN	cc88h11.s1 NCI CGAP_G031 Homo sapiens cDNA clone IMAGE:1354725 3' similar to SW:POL_MLVRK
1109	14163	27103	1.9	7.0E-62	AV714334.1	EST_HUMAN	P31795 POL POLYPROTEIN ;
3517	16563	29488	0.7	7.0E-62	P17480	SWISSPROT	AV714334 DCB Homo sapiens cDNA clone DCBAMA08 5'
6023	19109	32309	1.13	7.0E-62	11427665	NT	NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1) (AUTOANTIGEN NOR-90)
11678	24644	38221	9.39	7.0E-62	AI2086891.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20261), mRNA
3012	16070		1.49	6.0E-62	U09410.1	NT	gg53a04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839150 3' similar to TR:O15103
							O15103 HYPOTHETICAL 27.3 KD PROTEIN ;
							Human zinc finger protein ZNF131 mRNA, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
3395	16444		4.9	6.0E-62	11418255	NT	Homo sapiens CGL-56 protein (CGL-56), mRNA
7887	20831	34208	3.27	6.0E-62	AJ762801.1	EST_HUMAN	wf04d02.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
7887	20831	34210	3.27	6.0E-62	AJ762801.1	EST_HUMAN	wf04d02.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
8422	21391		0.72	6.0E-62	AW501124.1	EST_HUMAN	UHF-BPOp-af-4-09-0-UJ1 NIH_MGC_S1 Homo sapiens cDNA clone IMAGE:3072833 5'
8600	21568	34684	1.4	6.0E-62	11431139	NT	Homo sapiens CGL-18 protein (LOC51008), mRNA
9708	22682	36118	4.02	6.0E-62	AW814393.1	EST_HUMAN	MF3-ST0203-130100-025-a09 ST0203 Homo sapiens cDNA
416	13489	26424	2.28	5.0E-62	AJ650528.1	EST_HUMAN	wf01e07.x1 NCI CGAP Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG95_HUMAN
2418	15423	28448	3.61	6.0E-62	AJ271735.1	NT	Q08379 GOLGIN-95, contains element MER22 repetitive element;
2416	15423	28447	3.61	6.0E-62	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2596	15597	28615	1.43	5.0E-62	U89487.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2598	15597	28618	1.43	5.0E-62	U89487.1	NT	Human xanthine dehydrogenase/cadexase mRNA, complete cds
3430	16478	28397	2.95	6.0E-62	4506758	NT	Human xanthine dehydrogenase/cadexase mRNA, complete cds
4355	17392	30284	1.91	5.0E-62	AA431083.1	EST_HUMAN	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4589	17611		1.1	5.0E-62	AW905887.1	EST_HUMAN	zw78e09.s1 Soares testis_NHTT Homo sapiens cDNA clone IMAGE:782344 3' similar to SW:NRDC_RAT
8894	21890	35283	0.94	5.0E-62	4506758	NT	P47245 NARDILYSIN;
9875	22828	38282	8.13	5.0E-62	AW410687.1	EST_HUMAN	RC5-NN1089-100500-021-H03 NN1089 Homo sapiens cDNA
11598	24534	38090	2.18	5.0E-62	11425574	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
11598	24534	38091	2.18	5.0E-62	11425574	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
841	13898	28853	2.28	4.0E-62	AW161479.1	EST_HUMAN	fn07g09.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861616 5'
841	13898	28854	2.28	4.0E-62	AW161479.1	EST_HUMAN	Homo sapiens muscle specific gene (M8), mRNA
842	13898	28853	1.27	4.0E-62	AW161479.1	EST_HUMAN	Homo sapiens muscle specific gene (M8), mRNA
842	13898	28854	1.27	4.0E-62	AW161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
1458	14491		1	4.0E-62	AA311281.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
2464	15468	28491	2.85	4.0E-62	AJ827900.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
2464	15468	28492	2.85	4.0E-62	AJ827900.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
3410	16459		6.48	4.0E-62	4557887	NT	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6032	18115	32318	1.63	4.0E-62	4506978	NT	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2) mRNA
6429	19495	32748	2.53	4.0E-62	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7377	20347	33688	2.08	4.0E-62	11421041	NT	Homo sapiens phosphatidylyl pyrophosphate synthase 2 (PRPS2), mRNA
7896	20839	34219	2.59	4.0E-62	7637057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
7896	20839	34220	2.59	4.0E-62	7637057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
8511	21478	34883	0.93	4.0E-62	11428973	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1), mRNA
9188	22184	35584	5.95	4.0E-62	AB033089.1	NT	Homo sapiens mRNA for KIAA1263 protein, partial cds
11353	24303	37830	3.05	4.0E-62	778768.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC8pA16D3
11353	24303	37831	3.05	4.0E-62	778768.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC8pA16D3
11598	24536	39083	1.57	4.0E-62	AW023569.1	EST_HUMAN	af58g04.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2487761 5'
12267	25080	38176	3.39	4.0E-62	11418086	NT	Homo sapiens putative nuclear protein (HRHFB2122), mRNA
12491	25903		1.3	4.0E-62	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae) like 1 (NHFP2L1), mRNA
12871	25505	31706	1.96	4.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12824	25500	31703	16.77	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12824	25500	31704	16.77	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12877	25542	31717	3.07	4.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
75	13192	26114	0.68	3.0E-62	4557794	NT	Homo sapiens neurofibromin 2 (bilateral acoustic neuroma) (NF2) mRNA
3059	16116	29029	1.02	3.0E-62	AB040908.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
3059	16116	29030	1.02	3.0E-62	AB040908.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
3712	16755	29689	3.52	3.0E-62	X62858.1	NT	Human cyclophilin-related processed pseudogene
8885	21851	35272	4.85	3.0E-62	AF632733.1	EST_HUMAN	wc33f04.x1 NCL_CGAP_K611 Homo sapiens cDNA clone IMAGE:2288803 3' similar to contains THR12
1235	14372	27232	2.78	2.0E-62	AL163284.2	NT	THR repetitive element:
8142	21079	34479	0.98	2.0E-62	AA037400.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
9127	22083	35520	4.47	2.0E-62	BF328911.1	EST_HUMAN	EST178374 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
9127	22083	35521	4.47	2.0E-62	BF328911.1	EST_HUMAN	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
10533	23455		4.96	2.0E-62	AF224689.1	NT	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
11898	24873		20.5	2.0E-62	BF330676.1	EST_HUMAN	(UBE2D3) genes, complete cds
1045	14091	27044	1.88	1.0E-62	AF248540.1	NT	QV4-BT0257-081189-017-e03 BT0257 Homo sapiens cDNA
1547	14580	27552	12.74	1.0E-62	L78810.1	NT	Homo sapiens intersectin 2 (SH-93D1B) mRNA, complete cds
							Homo sapiens ADP/ATP carrier protein (ANT-2) genes, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1815	14842	27833	1.18	1.0E-62	AA625207.1	EST_HUMAN	af70ef1.1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1047404 5' similar to WP-K01H12.1
2825	15883	28908	1.45	1.0E-62	AL039044.1	EST_HUMAN	CE03453 ; DKFZp566f104.1 583 (synonym: hfkid2) Homo sapiens cDNA clone DKFZp566f104 5'
3435	16482		1.15	1.0E-62	AB040911.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
4558	17579	30470	1.43	1.0E-62	8923201	NT	Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA
5169	18178	31058	0.88	1.0E-62	AA148822.1	EST_HUMAN	z06808.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:491611 5' similar to
5198	18205	31078	0.94	1.0E-62	L23503.1	NT	SW:C561_BOVIN_P10897 CYTOCHROME B661. ; Human glucagon-like peptide-1 receptor (GLP-1) mRNA, complete cds
6421	19488	32738	2.84	1.0E-62	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
7341	20312	33655	0.91	1.0E-62	AA490060.1	EST_HUMAN	ab05cd2.s1 Striatogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838808 3'
7352	20322	33669	2.48	1.0E-62	AA722878.1	EST_HUMAN	zg89f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409771 3'
7352	20322	33670	2.48	1.0E-62	AA722878.1	EST_HUMAN	zg89f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409771 3'
9110	22076	35502	0.66	1.0E-62	AA280050.1	EST_HUMAN	zs93e07.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705060 5'
9413	22378	35816	1.82	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9413	22378	35817	1.82	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9457	22421	35858	1.97	1.0E-62	X15533.1	NT	H.sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9457	22421	35859	1.97	1.0E-62	X15533.1	NT	H.sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9915	22736	36189	3.42	1.0E-62	AA465170.1	EST_HUMAN	aa33d08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815055 3'
11694	24689	38237	2.41	1.0E-62	Z79686.1	NT	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC9pA14D8
12750	25397		2.22	1.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12856	25529	31714	3.25	1.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
338	13427	26349	2.41	9.0E-63	AW816405.1	EST_HUMAN	QV4-ST0234-181189-037-f05 ST0234 Homo sapiens cDNA
2353	15362		1.51	9.0E-63	C18159.1	EST_HUMAN	C18159 Human placenta cDNA (TFujiiwara) Homo sapiens cDNA clone GEN-558C10 5'
4071	17107	30000	0.28	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4071	17107	30001	0.29	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
5315	18331	38014	2.17	9.0E-63	11418185	NT	Homo sapiens acinase 2, mitochondrial (ACO2), mRNA
5541	18638	31578	1.3	9.0E-63	Y15056.1	NT	Homo sapiens mRNA for PKB kinase
7388	20357	33709	3.41	9.0E-63	11426985	NT	Homo sapiens nucleoporin 88kD (NUP88), mRNA
8138	21075	34475	0.73	9.0E-63	4885544	NT	Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 3 (PDK3) mRNA
8689	21637	35060	1.58	9.0E-63	11421160	NT	Homo sapiens Ras association (RasGDS/AF-6) domain family 2 (RASSF2), mRNA
11246	24199	37719	1.54	9.0E-63	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11246	24199	37720	1.54	9.0E-63	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2351	15380	28382	1.1	8.0E-03	4557734	NT	Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA
2383	15391	28416	2.49	8.0E-03	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
3475	16521	29443	3.42	8.0E-03	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3475	16521	29444	3.42	8.0E-03	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
4294	17323	30203	3.75	8.0E-03	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
929	13982		1.87	7.0E-03	AB72197.1	EST_HUMAN	wim55g11.x1 NC1_CGAP_U2 Homo sapiens cDNA clone IMAGE:2439808 3'
6412	18516		23.22	6.0E-03	AA420803.1	EST_HUMAN	nc63f02.l1 NC1_CGAP_P1 Homo sapiens cDNA clone IMAGE:745947 similar to gb:Y003961 60S
9228	22192	35622	0.63	5.0E-03	11528484	NT	RIBOSOMAL PROTEIN (HUMAN);
3332	16383	28306	0.7	4.0E-03	AL163278.2	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
3821	16861	28764	1.16	4.0E-03	AB014607.1	NT	Homo sapiens chromosome 21 segment HS21C078
3821	16861	28765	1.16	4.0E-03	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
6588	19848	32917	2.92	4.0E-03	AW760372.1	EST_HUMAN	Homo sapiens mRNA for KIAA0707 protein, partial cds
6588	19848	32918	2.92	4.0E-03	AW760372.1	EST_HUMAN	CM3-BT0595-180100-072-c09 BT0595 Homo sapiens cDNA
11487	24410	37858	2.12	4.0E-03	AW134709.1	EST_HUMAN	CM3-BT0595-180100-072-c09 BT0595 Homo sapiens cDNA
11487	24410	37859	2.12	4.0E-03	AW134709.1	EST_HUMAN	UIH-BI1-abq-e-02-0-UI.s1 NC1_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
13023	25571		1.49	4.0E-03	AA628058.1	EST_HUMAN	UIH-BI1-abq-e-02-0-UI.s1 NC1_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
1952	14976	27875	2.52	3.0E-03	AB018080.1	NT	z084801.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744849 3' similar to contigs L1.11 L1
2790	15782	28798	1.85	3.0E-03	J00310.1	NT	repetitive element;
2832	14280	27243	15.82	3.0E-03	6006263	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
6619	19677	32954	32.29	3.0E-03	11545310	NT	Human Mat-RNA4 gene 1
10064	22891	36460	0.51	3.0E-03	BE876158.1	EST_HUMAN	Homo sapiens zinc finger protein 144 (ZNF144), mRNA
10064	22891	36461	0.51	3.0E-03	BE876158.1	EST_HUMAN	Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC38928), mRNA
193	13294	26221	1.91	2.0E-03	U07804.1	NT	601485556F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
198	13300	26228	1.91	2.0E-03	4885228	NT	601485556F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
498	13570		3.06	2.0E-03	4557824	NT	Human DNA topoisomerase I mRNA, partial cds
827	13885	26838	1.7	2.0E-03	7957042	NT	Homo sapiens eyes absent (Drosophila) homolog 2 (EYA2), mRNA
1569	14602	27577	4.18	2.0E-03	AB030388.1	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
1569	14602	27578	4.18	2.0E-03	AB030388.1	NT	Homo sapiens Down syndrome candidate region 1 (DSCL1), mRNA
1781	14810	27786	1.33	2.0E-03	BE410739.1	EST_HUMAN	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
3298	16351	28271	2.77	2.0E-03	AF109718.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3926	16966	26878	3.64	2.0E-63	U38891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
4901	17918	30810	0.95	2.0E-63	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfcs gene, complete cds; and unknown gene
5188	18197	31070	1.19	2.0E-63	BE146928.1	EST_HUMAN	QV4-HT0222-011198-018-g01 HT0222 Homo sapiens cDNA
5232	18240	31112	1.58	2.0E-63	6912617	NT	Homo sapiens glutamyl-peptide cyclotransferase (glutaminyl cyclase) (GP-CT), mRNA
5334	25635	31192	0.57	2.0E-63	11419428	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
5686	19071	32270	2.49	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-266-c05 FT0170 Homo sapiens cDNA
5688	19071	32271	2.49	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
6310	18381	32620	0.83	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
6310	18381	32621	0.83	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
							Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV6S1A1T, TCRBV7S1A1N2T, TCRBV6S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9V13S>
6860	19913	33208	1.23	2.0E-63	U69059.1	NT	Homo sapiens MIST mRNA, partial cds
6811	19963	33258	0.81	2.0E-63	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
6811	19963	33260	0.81	2.0E-63	AB032369.1	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC56934), mRNA
7278	20012	33315	1.48	2.0E-63	8910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC56934), mRNA
7278	20012	33318	1.48	2.0E-63	8910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC56934), mRNA
8058	20965	34391	0.82	2.0E-63	AB046844.1	NT	Homo sapiens mRNA for KIAA1624 protein, partial cds
8878	21845	35267	3.8	2.0E-63	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
9409	22374	35810	1.08	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
9409	22374	35811	1.06	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
10289	23224	36707	0.98	2.0E-63	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
11098	24058	37582	13.74	2.0E-63	N78945.1	EST_HUMAN	zb18805.s1 Soares, fetal lung, NBH-L19W Homo sapiens cDNA clone IMAGE302385 3' similar to gbcX17206 40S RIBOSOMAL PROTEIN S4 (HUMAN);
11127	24087	37614	2.32	2.0E-63	AF089810.1	NT	Homo sapiens neuradin III-alpha gene, partial cds
11127	24087	37615	2.32	2.0E-63	AF089810.1	NT	Homo sapiens neuradin III-alpha gene, partial cds
12381	25747	31515	6.02	2.0E-63	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
1515	14547	27518	0.93	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
1515	14547	27519	0.93	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
4370	17397	30278	3.4	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
4370	17397	30277	3.4	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
5426	18528	31408	1.66	1.0E-63	AJ271738.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5894	18653	32140	97.84	1.0E-63	AW682268.1	EST_HUMAN	QV0-ST0215-080100-083-509 ST0215 Homo sapiens cDNA
6531	19594	32855	0.72	1.0E-63	AW451950.1	EST_HUMAN	UHH-B13-att-H-02-Q-U1.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068763 3'
6531	19594	32856	0.72	1.0E-63	AW451950.1	EST_HUMAN	UHH-B13-att-H-02-Q-U1.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068763 3'
8816	21783		2.94	1.0E-63	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
13020	25859		5.18	1.0E-63	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
6078	19159	32370	0.56	9.0E-64	AW401433.1	EST_HUMAN	UHH-BK0-eat-b-09-Q-U1r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3053153 5'
8199	21169	34579	4.61	9.0E-64	AL478188.1	EST_HUMAN	hm50507.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2161525 3'
1048	14094		2.71	8.0E-64	BE280786.1	EST_HUMAN	601155232F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138038 5'
6263	19336	32569	3.25	8.0E-64	BE885755.1	EST_HUMAN	601808988F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910336 5'
12167	25034		8.22	8.0E-64	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12239	25070		2.63	8.0E-64	T60651.1	EST_HUMAN	Y488B02.1 Streptococcus pneumoniae (9337210) Homo sapiens cDNA clone IMAGE:79179 5'
3640	16598		0.8	7.0E-64	BE394321.1	EST_HUMAN	601311455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3633204 5'
4763	17783	30678	3.2	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1), mRNA
4763	17783	30678	3.2	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1), mRNA
8096	21032	34430	0.64	7.0E-64	4306786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
10303	23315	36794	4.76	7.0E-64	Y07848.1	NT	Homo sapiens EWS, gar22, rrp22 and barn22 genes
1735	14765	27748	3.88	8.0E-64	AI651992.1	EST_HUMAN	wb51607.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
1735	14765	27748	3.88	8.0E-64	AI651992.1	EST_HUMAN	wb51607.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
3139	16186	28105	4.25	8.0E-64	AW026445.1	EST_HUMAN	WV13603.x1 NCL_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
3139	16186	28106	4.25	8.0E-64	AW026445.1	EST_HUMAN	WV13603.x1 NCL_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
6703	18798	31973	2.43	8.0E-64	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
5703	18798	31974	2.43	8.0E-64	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
5725	18819	31998	6.33	8.0E-64	M13876.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1), mRNA, complete cds
5829	19015	32209	0.71	8.0E-64	11422189	NT	Homo sapiens calcitonin receptor (CALCR), mRNA
5829	19015	32210	0.71	8.0E-64	11422189	NT	Homo sapiens calcitonin receptor (CALCR), mRNA
7446	20412	33764	2.85	8.0E-64	11525878	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
7446	20412	33765	2.85	8.0E-64	11525878	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
8682	22635	36091	7.07	8.0E-64	11420555	NT	Homo sapiens acetyl-CoA synthetase (LOC55602), mRNA
8804	22800	36254	1.78	8.0E-64	AF274753.1	NT	Homo sapiens progressive ankylosis-like protein (ANK), mRNA, complete cds
10076	23003	36473	2.44	8.0E-64	S76476.1	NT	hKc [human, brain, mRNA, 2716 nt]
11121	24081	37605	4.48	8.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
11121	24081	37606	4.48	8.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11358	16186	29105	1.73	6.0E-64	AW026446.1	EST_HUMAN	wv13603.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
11358	16186	29108	1.73	6.0E-64	AW026446.1	EST_HUMAN	wv13603.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
12308	25172	31818	9.28	6.0E-64	11528198	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
821	13879	28829	3.66	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
821	13879	28830	3.66	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1341	14378	27345	0.93	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1724	14754	27740	1.7	5.0E-64	U89358.1	NT	Human I(3)mbt protein homolog mRNA, complete cds
2837	14509	27483	3.52	5.0E-64	7682205	NT	Homo sapiens KIAA0818 gene product (KIAA0818), mRNA
2837	14509	27484	3.52	5.0E-64	7682205	NT	Homo sapiens KIAA0818 gene product (KIAA0818), mRNA
3983	17023	28834	7.14	5.0E-64	AF017433.1	NT	Homo sapiens putative transcription factor CR63 (CR63) mRNA, partial cds
4132	17164	30053	0.93	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
8125	21082	34460	0.57	4.0E-64	BE794807.1	EST_HUMAN	601500382F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944397 5'
11164	24122	37650	1.55	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0107-120200-016-a03 ST0107 Homo sapiens cDNA
11164	24122	37651	1.55	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0107-120200-016-a03 ST0107 Homo sapiens cDNA
2208	15223	28243	6.32	3.0E-64	C18895.1	EST_HUMAN	G18895 Human placenta cDNA (TF-fujwars) Homo sapiens cDNA clone GEN:568E02 5'
3288	16322	29244	0.72	3.0E-64	BE794381.1	EST_HUMAN	601589565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
3467	16503	29422	1.85	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
3457	16503	29423	1.85	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
6200	19274	32608	1.36	3.0E-64	Z26273.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 28
6475	19540	32788	0.64	3.0E-64	AW500881.1	EST_HUMAN	UHLF-BF0p-ek-c-05-0-JLr1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3073161 5'
6641	19689	32875	2.78	3.0E-64	BF370000.1	EST_HUMAN	RC9-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
8809	21778	36201	1.78	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
8809	21778	36202	1.78	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
8840	21807	36225	2.73	3.0E-64	BE206821.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047875 5' similar to gb:L08068 DNAJ
8840	21807	36226	2.73	3.0E-64	BE206821.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047875 5' similar to gb:L08068 DNAJ
9782	22723	36177	1.54	3.0E-64	AL163246.2	NT	PROTEIN HOMOLOG 2 (HUMAN);
9782	22723	36178	1.54	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9872	22825	36278	0.8	3.0E-64	AW977394.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
9872	22825	36279	0.8	3.0E-64	AW977394.1	EST_HUMAN	EST389463 MAGO ressequences, MAGO Homo sapiens cDNA
11898	24876	36471	1.87	3.0E-64	AL163227.2	NT	EST389463 MAGO ressequences, MAGO Homo sapiens cDNA
1080	14134	27086	0.85	2.0E-64	AA009940.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
1398	14432	27401	1.2	2.0E-64	4757701	NT	af08d08.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1031151 3'
							Homo sapiens eIF4E-like cap-binding protein (4EHP) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2530	15533		2.06	2.0E-64	AB27030.1	EST_HUMAN	wc87b001.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element L1 repetitive element;
2536	15538	28500	3.13	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2538	15538	28501	3.13	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3801	16841	28748	0.97	2.0E-64	AW958145.1	EST_HUMAN	EST370215 MAGE resequences, MAGE Homo sapiens cDNA
3801	16841	28749	0.97	2.0E-64	AW958145.1	EST_HUMAN	EST370215 MAGE resequences, MAGE Homo sapiens cDNA
6121	19109	32424	2.2	2.0E-64	AU124387.1	EST_HUMAN	AU124387 NT2RM2 Homo sapiens cDNA clone NT2RM2002113 5'
6370	19438	32881	1.38	2.0E-64	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6832	19690	32909	4.02	2.0E-64	BF686537.1	EST_HUMAN	602123474F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4280395 5'
6745	19800	33080	1.5	2.0E-64	A078387.1	EST_HUMAN	oz20503.x1 Soares_tad_fetus_Nb2HF8_8w Homo sapiens cDNA clone IMAGE:1676717 3'
6859	19912	33208	3.88	2.0E-64	M77185.1	NT	H. sapiens dopamine receptor D5 pseudogene 1, partial cds
8108	21043	34442	0.57	2.0E-64	AW608785.1	NT	Homo sapiens axitin 2-binding protein 1 (A2BP1), mRNA
8184	21102	34501	0.93	2.0E-64	AW608785.1	EST_HUMAN	QV1-HT0413-010200-058-h12 HT0413 Homo sapiens cDNA
9016	21862	35400	5.89	2.0E-64	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
9016	21862	35401	5.89	2.0E-64	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
9495	22459	35899	0.43	2.0E-64	11423508	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
9688	22548	35999	0.93	2.0E-64	AU132570.1	EST_HUMAN	Homo sapiens hypothetical protein SBB167 (LOC57115), mRNA
11114	24074	37597	3.74	2.0E-64	BF628114.1	EST_HUMAN	AU132570 NT2RP4 Homo sapiens cDNA clone NT2RP4000109 5'
11391	24337	37886	4.89	2.0E-64	A1922811.1	EST_HUMAN	602042882F1 NCI_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4180556 5'
11391	24337	37887	4.59	2.0E-64	A1922811.1	EST_HUMAN	wn81508.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2452211 3'
11833	24716	38301	1.89	2.0E-64	BE268680.1	EST_HUMAN	wn81508.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2452211 3'
11833	24716	38302	1.89	2.0E-64	BE268680.1	EST_HUMAN	601185078F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3542822 5'
12316	25122	31844	1.47	2.0E-64	8587387	NT	601185078F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3542822 5'
12744	25393		3.64	2.0E-64	H65182.1	EST_HUMAN	Homo sapiens perlecan (Drosophila) homolog 3 (PER3), mRNA
258	13355	26278	1.48	1.0E-64	AF231919.1	NT	CHR220101 Chromosome 22 exon Homo sapiens cDNA clone C22_132 5'
1794	14823	27807	17.02	1.0E-64	AB220419.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
3024	16081	28004	0.81	1.0E-64	4507334	NT	au60001.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519136 3' similar to gb:U21696_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element MSR1 repetitive element;
3522	16588	29492	5.73	1.0E-64	AF198779.1	NT	Homo sapiens synaptobrevin 1 (SYN1), mRNA
3588	16643	29562	1.38	1.0E-64	AF228527.1	NT	Homo sapiens transcription factor (GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel a)
3598	16643	29563	1.38	1.0E-64	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3917	16957	29870	2	1.0E-64	8822829	NT	Homo sapiens TRIAD3 mRNA, partial cds
							Homo sapiens hypothetical protein FLJ11026 (FLJ11026), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10424	23346	38831	0.68	1.0E-64	AA042976.1	EST_HUMAN	zk53308.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486567 3'
12288	25104		2.03	1.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2284	15287	26321	1.64	9.0E-65	X88211.1	NT	H.sapiens DNA for endogenous retroviral like element
2284	15287	26322	1.64	9.0E-65	X88211.1	NT	H.sapiens DNA for endogenous retroviral like element
11883	24745		35.25	9.0E-65	BF330878.1	EST_HUMAN	QV4-BT0257-081199-017-c03 BT0257 Homo sapiens cDNA
11837	24720	38305	7.27	8.0E-65	A1828244.1	EST_HUMAN	au581-07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2510005 3' similar to
10515	23437	36936	2.13	7.0E-65	BE081653.1	EST_HUMAN	SW:RL21_HUMAN P46779 60S RIBOSOMAL PROTEIN L21.;
1059	14105	27056	2.73	6.0E-65	AV721898.1	EST_HUMAN	QV2-BT0635-240400-162-c02 BT0635 Homo sapiens cDNA
1938	14982		12.23	6.0E-65	AA560829.1	EST_HUMAN	AV721898 HTB Homo sapiens cDNA clone HTBZC08 5'
6721	19777	33056	0.87	6.0E-65	AA560829.1	EST_HUMAN	h186d10.s1 NCI CGAP_P111 Homo sapiens cDNA clone IMAGE:368379 similar to gb:K03002 60S
					AA560829.1	EST_HUMAN	RIBOSOMAL PROTEIN L32 (HUMAN);
					AA560829.1	EST_HUMAN	h137607.s1 NCI CGAP_P15 Homo sapiens cDNA clone IMAGE:954517
9098	22064	35489	2.49	6.0E-65	AW083252.1	EST_HUMAN	xc07609.x1 NCI CGAP_Co21 Homo sapiens cDNA clone IMAGE:2583545 3' similar to TR-Q63308 Q63308
9365	22330	35759	4.16	6.0E-65	AA427878.1	EST_HUMAN	LONG INTERSPERSED REPETITIVE DNA CONTAINING 7 ORFS; contains L1.1.b2 L1 repetitive element ;
9365	22330	35760	4.16	6.0E-65	AA427878.1	EST_HUMAN	zw53308.s1 Soares_totat_fetus_Nb24-IF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
9429	22393	35832	1.08	6.0E-65	A1085314.1	EST_HUMAN	zw53308.s1 Soares_totat_fetus_Nb24-IF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
9429	22393	35833	1.08	6.0E-65	A1085314.1	EST_HUMAN	qf18h05.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750425 3'
11220	24173	37699	2.69	6.0E-65	BE667618.1	EST_HUMAN	qf18h05.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750425 3'
11378	24325	37654	1.51	6.0E-65	BF340825.1	EST_HUMAN	601340485F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682877 5'
11825	24708	38291	1.8	6.0E-65	AL163210.2	NT	602037721F1 NCI CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4185677 5'
632	19897	26617	1.82	6.0E-65	AF084604.1	NT	Homo sapiens chromosome 21 segment HS21C010
1355	14390	27359	1.22	5.0E-65	7681951	NT	Homo sapiens KE03 protein mRNA, partial cds
1355	14390	27360	1.22	5.0E-65	7681951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
2184	15180	28200	1.61	5.0E-65	AB033788.1	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
3269	16323	29245	2.19	5.0E-65	4507948	NT	Homo sapiens HPAD-cobony10 mRNA for peptidylarginine diaminase type I, complete cds
3269	16323	29246	2.13	5.0E-65	4507948	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
7052	20074	33381	1.18	5.0E-65	4504806	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10633	23754	37253	1.28	5.0E-65	AF008668.1	NT	Homo sapiens interferon-related developmental regulator 1 (IFRD1), mRNA
195	13298	26224	2.33	4.0E-65	AL120419.1	EST_HUMAN	Homo sapiens interferon-related developmental regulator 1 (IFRD1), mRNA
						EST_HUMAN	Multiple sclerosis associated retrovirus polyprotein (pcp) mRNA, partial cds
747	13908	26748	1.29	4.0E-65	AL268468.1	EST_HUMAN	DKFZp781G108.1_761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781G108 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
747	13808	28749	1.29	4.0E-65	AJ268468.1	EST_HUMAN	qm46e01.x1 Soares_placenta_8to9weeks_2NbtHP8tc8W Homo sapiens cDNA clone IMAGE:1891800 3'
1080	14124	27077	1.51	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
1482	14515	27489	15.68	4.0E-65	4506636	NT	Homo sapiens ribosomal protein L34 (RPL34) mRNA
3971	17011	28925	0.97	4.0E-65	AW968185.1	EST_HUMAN	RC2-BN0033-160200-013-a03 BN0033 Homo sapiens cDNA
6279	19351	32565	4.17	4.0E-65	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
6279	19351	32568	4.17	4.0E-65	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
7280	20261	33595	0.62	4.0E-65	AY008372.1	NT	Homo sapiens oxysterol binding protein-related protein 3 (ORP3) mRNA, complete cds
7324	20286	33638	0.84	4.0E-65	M19878.1	NT	Human clobindin 27 gene, exons 10 and 11, and L1 and Alu repeats
7429	20396	33748	2.48	4.0E-65	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7797	20749	34124	0.58	4.0E-65	U40372.1	NT	Human 3',5' cyclic nucleotide phosphodiesterase (HSPDE1C3A) mRNA, partial cds
7797	20749	34125	0.58	4.0E-65	U40372.1	NT	Human 3',5' cyclic nucleotide phosphodiesterase (HSPDE1C3A) mRNA, partial cds
8118	21055	34452	0.81	4.0E-65	U39656.1	NT	Human MAP kinase kinase 6 (MKK6) mRNA, complete cds
8174	21144	34549	0.78	4.0E-65	5453765	NT	Homo sapiens nei (chicken)-like 2 (NELL2), mRNA
8174	21144	34550	0.78	4.0E-65	5453765	NT	Homo sapiens nei (chicken)-like 2 (NELL2), mRNA
9501	22465	35605	1.34	4.0E-65	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10946	23986		2.65	4.0E-65	AJ277648.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
11301	24251	37777	2.99	4.0E-65	AV798764.1	EST_HUMAN	AV798764 CB Homo sapiens cDNA clone CBCCBE05 5'
11434	24378	37918	6.02	4.0E-65	AF119846.1	NT	Homo sapiens PRO1474 mRNA, complete cds
12608	14124	27077	1.79	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
13091	13286	26224	1.6	4.0E-65	AL120418.1	EST_HUMAN	DKFZp761G108 J1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G108 5'
97	13214	26139	3.16	3.0E-65	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
98	13214	26139	5.62	3.0E-65	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1238	15819		22.13	3.0E-65	X78832.1	NT	H. sapiens HZF9 mRNA for zinc finger protein
1840	14987	27868	1.7	3.0E-65	A1000682.1	EST_HUMAN	ov23803.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element
3003	16061	28979	0.74	3.0E-65	D87078.2	NT	MSR1 repetitive element;
3280	16343	29264	0.68	3.0E-65	4504650	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
						NT	Homo sapiens laminin, beta 1 (LAMB1), mRNA
3734	16776	28688	1.61	3.0E-65	A1000682.1	EST_HUMAN	ov23803.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element
4679	17700	30588	1.33	3.0E-65	6812385	NT	MSR1 repetitive element;
10429	23351	36835	1.42	3.0E-65	BE787366.1	EST_HUMAN	Homo sapiens rabo GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA
						EST_HUMAN	601479686F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882405 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11719	23916	37433	8.57	3.0E-65	AA430008.1	EST_HUMAN	2465406.f1 Soares_testis_NFT Homo sapiens cDNA clone IMAGE:781042 5'
3415	18483	28384	6.08	2.0E-65	BF680294.1	EST_HUMAN	602155002F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4295988 5'
6886	19743		4.55	2.0E-65	BE263373.1	EST_HUMAN	601190883F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3834741 5'
7339	20310	33653	27.84	2.0E-65	BF576922.1	EST_HUMAN	602194359F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4288295 5'
9197	22163	35592	1.26	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
9197	22163	35593	1.26	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
12298	25089		2.75	2.0E-65	AA307904.1	EST_HUMAN	EST178755 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus
12708	25728		1.95	2.0E-65	BF248088.1	EST_HUMAN	601854033F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4073789 5'
540	13611	26530	1.54	1.0E-65	7657495	NT	Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX6), mRNA
2056	15075	28095	1.07	1.0E-65	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
3395	18434	28361	0.8	1.0E-65	BE466881.1	EST_HUMAN	1224409.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3208888 3'
4023	17061	28962	1.71	1.0E-65	4504082	NT	Homo sapiens glycican 4 (GPC4) mRNA
4023	17061	28963	1.71	1.0E-65	4504082	NT	Homo sapiens glycican 4 (GPC4) mRNA
4234	17263	30147	2.4	1.0E-65	AW029340.1	EST_HUMAN	W08009.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
4234	17263	30148	2.4	1.0E-65	AW029340.1	EST_HUMAN	W08009.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
5358	18463	31332	0.54	1.0E-65	BE089509.1	EST_HUMAN	QV0-BT0702-170400-194-109 BT0702 Homo sapiens cDNA
5358	18463	31333	0.54	1.0E-65	BE089509.1	EST_HUMAN	QV0-BT0702-170400-194-109 BT0702 Homo sapiens cDNA
5554	18651	31595	0.67	1.0E-65	AI243738.1	EST_HUMAN	q188107.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1864108 3' similar to TR:Q07823
8597	21585	34980	5.47	1.0E-65	AW820481.1	EST_HUMAN	Q07823 MAC30 PROTEIN;
8597	21585	34981	5.47	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0288-140200-042-f12 ST0288 Homo sapiens cDNA
8823	21591	35009	2.16	1.0E-65	BE732118.1	EST_HUMAN	QV2-ST0288-140200-042-f12 ST0288 Homo sapiens cDNA
8823	21591	35010	2.16	1.0E-65	BE732118.1	EST_HUMAN	601566124F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3841012 5'
8882	21630	35050	2.14	1.0E-65	AU141295.1	EST_HUMAN	601566124F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3841012 5'
8882	21630	35051	2.14	1.0E-65	AU141295.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000356 5'
9192	22158	35586	1.94	1.0E-65	BF698707.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000356 5'
9374	22339	35769	2.26	1.0E-65	AU128040.1	EST_HUMAN	602126239F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4283313 5'
9374	22339	35770	2.25	1.0E-65	AU128040.1	EST_HUMAN	AU128040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
9386	22351		2.52	1.0E-65	11431984	NT	AU128040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
9692	22681	36138	5.48	1.0E-65	AI191716.1	EST_HUMAN	Homo sapiens Inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
10245	23170	36559	1.28	1.0E-65	AU153783.1	EST_HUMAN	q156402.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733450 3' similar to gb:M295561 ZINC FINGER PROTEIN 8 (HUMAN); contains MER19.11 MER19 repetitive element;
10665	23587	37095	0.64	1.0E-65	AA069559.1	EST_HUMAN	AI153783 NT2RP3 Homo sapiens cDNA clone NT2RP2004016 3'
							275a04.f1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:382734 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10835	23855	37371	1.02	1.0E-65	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
11011	23878	37501	7.57	1.0E-65	M28187.1	NT	Human platelet factor 4 variation 4 (PF4var1) gene, complete cds
11131	24091	37620	10.37	1.0E-65	45068630	NT	Homo sapiens ribosomal protein L7a (RPL7A) mRNA
11465	24408	37855	2.43	1.0E-65	BF688707.1	EST_HUMAN	602128239F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4283313 5'
11545	24488	38040	1.89	1.0E-65	AI621017.1	EST_HUMAN	ts78a08.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2237170 3' similar to gb:L15533_mn1
12289	25105		3.13	1.0E-65	11418041	NT	PANCREATITIS ASSOCIATED PROTEIN 1 PRECURSOR (HUMAN);
12391	25168	31615	7.2	1.0E-65	11418322	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
12798	25427		1.87	1.0E-65	11418248	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
72	13180	28110	0.94	9.0E-68	AL160311.1	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
72	13180	28111	0.94	9.0E-68	AL160311.1	NT	Novel human gene mapping to chromosome 22
1355	14391	27361	0.93	9.0E-68	5031980	NT	Novel human gene mapping to chromosome 22
1355	14391	27362	0.93	9.0E-68	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1480	14513		6.17	9.0E-68	M87299.1	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
3916	16858	29868	0.74	9.0E-68	M72393.1	NT	Human transposon-like element, partial
3916	16858	29869	0.74	9.0E-68	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4719	17739	30631	0.73	9.0E-68	AL137163.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4717	17737	30629	1.58	8.0E-68	AA424304.1	EST_HUMAN	Novel human gene mapping to chromosome X
11675	24841		1.48	7.0E-68	BE064410.1	EST_HUMAN	z480-c05.t1 Soares_NHt-MPv_S1 Homo sapiens cDNA clone IMAGE:787048 5'
							RC4-BT0311-141189-011-h08 BT0311 Homo sapiens cDNA
							wn57h07.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G8.4A
4393	17421	30304	1.01	6.0E-68	AI924653.1	EST_HUMAN	CE18585 ;
4393	17421	30305	1.01	6.0E-68	AI924653.1	EST_HUMAN	wn57h07.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G8.4A
							CE18585 ;
4393	17421	30306	1.01	6.0E-68	AI924653.1	EST_HUMAN	wn57h07.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G8.4A
8777	21744		0.82	6.0E-68	BE178583.1	EST_HUMAN	CE18585 ;
11493	24436	37885	4.18	6.0E-68	X98181.1	NT	PM2-HT0604-030300-001-h08 HT0604 Homo sapiens cDNA
1369	14403	27373	1.94	6.0E-68	BE064410.1	EST_HUMAN	H.sapiens mRNA for ribosomal protein L31
9849	22583	36041	15.54	5.0E-68	11420557	NT	RC4-BT0311-141189-011-h08 BT0311 Homo sapiens cDNA
791	13850	26797	1.39	4.0E-68	6879816	NT	Homo sapiens thyroid hormone receptor binding protein (AIB3), mRNA
1750	14779	27764	1.16	4.0E-68	AW897798.1	EST_HUMAN	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
2288	15301	28325	1.84	4.0E-68	X98211.1	NT	RC1-NN0063-100500-022-a02 NN0063 Homo sapiens cDNA
2481	15485		2.82	4.0E-68	AJ223364.1	NT	H.sapiens DNA for endogenous retroviral like element
4823	17840		3.19	4.0E-68	8835487	NT	Homo sapiens germ-line DNA upstream of Ikappa locus
							Human endogenous retrovirus, complete genome

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5630	18728	31887	3.89	4.0E-08	11428843	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methylenetetrahydrofolate cyclohydrolase (MTHFD2), mRNA
5835	18825	32109	0.78	4.0E-08	AW939119.1	EST_HUMAN	QV1-OT00089-110200-087-g10 DT0089 Homo sapiens cDNA
7036	18368	31265	4.69	4.0E-08	AW965473.1	EST_HUMAN	EST377548 IMAGE resequences, MAGI Homo sapiens cDNA
7338	20309	33652	7.18	4.0E-08	U78168.1	NT	Homo sapiens cAMP-regulated guanine nucleotide exchange factor 1 (cAMP-GEF1) mRNA, complete cds
7891	18728	31887	0.98	4.0E-08	11428843	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methylenetetrahydrofolate cyclohydrolase (MTHFD2), mRNA
8413	21382	34789	6.46	4.0E-08	11421638	NT	Homo sapiens hypothetical protein FLJ20116 (FLJ20116), mRNA
8472	21441	34859	1.46	4.0E-08	X67147.1	NT	Human endogenous retrovirus PHE.1 (ERV8)
11020	23985	37512	1.75	4.0E-08	BF507493.1	EST_HUMAN	UH-BW1-ant-e-10-0-U1.s1 NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE:3070747 3'
11706	24671	38248	1.53	4.0E-08	AB023215.1	NT	Homo sapiens mRNA for KIAA0898 protein, partial cds
1424	14457	27432	5.89	3.0E-08	4502088	NT	Homo sapiens scute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1424	14457	27433	5.89	3.0E-08	4502088	NT	Homo sapiens scute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1899	15020	28027	1.07	3.0E-08	N55323.1	EST_HUMAN	SW-H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2 [2] PIRB58612;
1899	15020	28028	1.07	3.0E-08	N55323.1	EST_HUMAN	YZ27g12.1 Soares_multiple_sclerosis_2NIBHMS Homo sapiens cDNA clone IMAGE:284328 5' similar to
1899	15020	28029	1.07	3.0E-08	N55323.1	EST_HUMAN	SW-H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2 [2] PIRB58612;
2718	16191	28101	4.78	3.0E-08	11411880	NT	YZ27g12.1 Soares_multiple_sclerosis_2NIBHMS Homo sapiens cDNA clone IMAGE:284328 5' similar to
3134	16191	28101	4.78	3.0E-08	7882223	NT	SW-H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2 [2] PIRB58612;
5542	18638	31579	0.78	3.0E-08	AB020699.1	NT	YZ27g12.1 Soares_multiple_sclerosis_2NIBHMS Homo sapiens cDNA clone IMAGE:284328 5' similar to
5857	18763	31920	0.79	3.0E-08	M13975.1	NT	SW-H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2 [2] PIRB58612;
5857	18958	32143	1.49	3.0E-08	11417948	NT	YZ27g12.1 Soares_multiple_sclerosis_2NIBHMS Homo sapiens cDNA clone IMAGE:284328 5' similar to
5857	18958	32144	1.49	3.0E-08	11417948	NT	SW-H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2 [2] PIRB58612;
7690	20620	33985	4.07	3.0E-08	X92211.1	NT	Homo sapiens TGF-beta-induced transcription factor 2 (TGIF2), mRNA
9853	22836	36290	0.7	3.0E-08	AK024453.1	NT	Homo sapiens KIAA0848 gene product (KIAA0848), mRNA
10077	23004	36474	0.82	3.0E-08	11417118	NT	Homo sapiens KIAA0892 protein, partial cds
10433	23355	36841	0.69	3.0E-08	7019480	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
10893	23809	37315	0.97	3.0E-08	AF155659.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11838	24721	38308	5.1	3.0E-68	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B58), alpha isoform (PPP2R5A) mRNA
13109	25629	31847	1.38	3.0E-68	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
63	13173	28082	1.94	2.0E-68	7857334	NT	Homo sapiens Mitshapen/NIK-related kinase (MINIK), mRNA
53	13173	28083	1.94	2.0E-68	7857334	NT	Homo sapiens Mitshapen/NIK-related kinase (MINIK), mRNA
422	13117	26015	0.7	2.0E-68	4505624	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
422	13117	26016	0.7	2.0E-68	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
1843	14889	27887	2.18	2.0E-68	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
2241	15255	28278	2.33	2.0E-68	X65859.1	NT	H. sapiens pseudogene for the low affinity IL-8 receptor
2896	18044	28965	1.39	2.0E-68	X63859.1	NT	H. sapiens pseudogene for the low affinity IL-8 receptor
3532	16578	29501	0.79	2.0E-68	8923280	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3777	16519	29727	0.9	2.0E-68	AL117233.1	NT	Novel human gene mapping to chromosome 1
4685	17706	30598	36.62	2.0E-68	AJ133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
4685	17706	30598	36.62	2.0E-68	AJ133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
5614	19000	32181	0.82	2.0E-68	AW988854.1	EST_HUMAN	EST380930 MAGe resequenced, MAGJ Homo sapiens cDNA
5614	19000	32182	0.82	2.0E-68	AW988854.1	EST_HUMAN	EST380930 MAGe resequenced, MAGJ Homo sapiens cDNA
9199	22165	35595	2.88	2.0E-68	N45480.1	EST_HUMAN	W58c02.r1 Scores_multiple_sclerosis_2N1b-HMSP Homo sapiens cDNA clone IMAGE:277838 5'
12614	25941		2.61	2.0E-68	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
2804	15983	28885	1.58	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
2804	15983	28886	1.58	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4412	15983	28885	3.69	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4412	15983	28886	3.69	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
5455	18557	31468	5.82	1.0E-68	BF673088.1	EST_HUMAN	602152886F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4284151 5'
5875	18984	32154	0.64	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-E04 NT0101 Homo sapiens cDNA
5875	18984	32155	0.64	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-E04 NT0101 Homo sapiens cDNA
7125	20058	33364	1.09	1.0E-68	BF328623.1	EST_HUMAN	RCS-BN0183-010900-034-G08 BN0183 Homo sapiens cDNA
8801	21768	35192	1.2	1.0E-68	AA868858.1	EST_HUMAN	aa80604.s1 NC1 CGAP GC81 Homo sapiens cDNA clone IMAGE:827282 3'
9781	22722	36176	0.7	1.0E-68	AA018828.1	EST_HUMAN	aa07e12.r1 Scores retina N2b-4HR Homo sapiens cDNA clone IMAGE:363118 5'
10737	23659	37153	0.9	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPC8VA05 5'
10737	23659	37154	0.9	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPC8VA05 5'
10893	23913	37428	0.44	1.0E-68	BE044595.1	EST_HUMAN	hs07n02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040563 3'

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11280	24240	37767	2.47	1.0E-08	AF111167.2	NT	Homo sapiens Jun dimerization protein gene, partial cds, cfos gene, complete cds, and unknown gene
11853	24735	38322	1.89	1.0E-08	AW968744.1	EST_HUMAN	EST360820 MAGE sequences, MAGJ Homo sapiens cDNA
12398	25170		2.75	9.0E-07	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
380	13483	26425	2.51	7.0E-07	AW162232.1	EST_HUMAN	au75d02.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104
1382	14416	27386	1.23	7.0E-07	AA389416.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1558	14580	27561	1.19	7.0E-07	W85847.1	EST_HUMAN	EST18812 Testis 1 Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, consaid
1558	14580	27562	1.19	7.0E-07	W85847.1	EST_HUMAN	ZK363
2048	15067	28036	1.02	7.0E-07	7657243	NT	21558b05.f1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2048	15067	28037	1.02	7.0E-07	7657243	NT	21558b05.f1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2821	13483	26425	2.78	7.0E-07	AW162232.1	EST_HUMAN	Homo sapiens Inositol 1,3,4-trisphosphate 5/6 kinase (ITPK1), mRNA
6199	18273	32507	0.96	7.0E-07	10190685	NT	au75d02.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104
6401	19489	32716	1.82	7.0E-07	11425572	NT	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
6401	19489	32717	1.82	7.0E-07	11425572	NT	Homo sapiens zinc finger protein 304 (ZNF304), mRNA
6885	18837	33233	1.14	7.0E-07	4885084	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
7893	20836	34216	1.13	7.0E-07	11418212	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
7893	20836	34217	1.13	7.0E-07	11418212	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein
8698	21634	35055	0.89	7.0E-07	4557732	NT	1A (1101/188D) (ATP8N1A), mRNA
8284	22250	35681	0.73	7.0E-07	10835044	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
11895	24882	38458	2.45	7.0E-07	U82488.1	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
12169	25018	38619	1.92	7.0E-07	11430460	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
12169	25019	38820	1.92	7.0E-07	11430460	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
12639	25323	31788	1.86	7.0E-07	AB011398.1	NT	Homo sapiens retinaldehyde dehydrogenase 2 (RALDH2), mRNA
13009	25581		1.44	7.0E-07	11421527	NT	Human cyclochrome oxidase subunit VIIa (COX6A1P) pseudogene, complete cds
561	13631	26548	1.19	6.0E-07	X68988.1	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
788	13855	26802	1.7	6.0E-07	Z17227.1	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
1278	14313	27274	2.06	6.0E-07	Y14320.1	NT	Homo sapiens gene for AF-6, complete cds
3183	16238	28168	1.18	6.0E-07	4506434	NT	Homo sapiens mRNA for acetyl-CoA carboxylase
3451	16497	28414	1.33	6.0E-07	4507332	NT	Homo sapiens mRNA for transmembrane receptor protein
3451	16497	28415	1.33	6.0E-07	4507332	NT	Homo sapiens PIP88 gene, exons 3,4,5,6 & 7
							Homo sapiens retinoblastoma 1 (including osteosarcoma) (RB1) mRNA
							Homo sapiens Synapsin III (SYNS) mRNA, and translated products
							Homo sapiens Synapsin III (SYNS) mRNA, and translated products

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4152	17183	30069	0.79	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4162	17183	30070	0.79	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4734	17754	30647	3.56	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4734	17754	30648	3.56	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
6242	18250	31121	0.99	6.0E-67	AF016898.1	NT	Homo sapiens B-ATF gene, complete cds
5242	18250	31122	0.99	6.0E-67	AF016898.1	NT	Homo sapiens B-ATF gene, complete cds
3235	18290	28212	2.02	5.0E-67	AF006880.1	NT	Homo sapiens T cell receptor beta locus, TORBV7S3A2 to TORBV12S2 region
11329	24279		13.19	5.0E-67	BED10038.1	EST_HUMAN	PM3-BN0178-100400-001-g04 BN0178 Homo sapiens cDNA
1331	14368	27335	2.25	4.0E-67	R90819.1	EST_HUMAN	yn02d11.1 Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:167253 5'
8355	21324	34738	0.89	4.0E-67	A1733032.1	EST_HUMAN	q28a05.55 NCL_CGAP_K143 Homo sapiens cDNA clone IMAGE:1463288 3' similar to SW_Z33A_HUMAN
8725	21683		1.18	4.0E-67	BF357321.1	EST_HUMAN	Q06730 ZINC FINGER PROTEIN 33A:
11403	24347		1.46	4.0E-67	AA714294.1	EST_HUMAN	RC0-HT0834-150900-028-c03 HT0834 Homo sapiens cDNA
2824	13699	28620	1.16	3.0E-67	AA333768.1	EST_HUMAN	rw06a01.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238472 3' similar to TR:O10385 O10385
4723	17743	30634	2.52	3.0E-67	AW889159.1	EST_HUMAN	PRO-POL-DUTPASE POLYPROTEIN:
4753	17773		1.08	3.0E-67	AL163278.2	NT	EST37803 Embryo, 9 week Homo sapiens cDNA 5' end
8522	21490	34905	1.15	3.0E-67	BF196068.1	EST_HUMAN	MR3-SN0068-040500-008-001 SN0068 Homo sapiens cDNA
11588	24528		15.35	3.0E-67	AA927874.1	EST_HUMAN	Hr8105.x1 NCL_CGAP_K111 Homo sapiens cDNA clone IMAGE:3194913 3' similar to SW:RHOP_MOUSE
190	13291	28217	0.97	2.0E-67	BE346854.1	EST_HUMAN	Q61085 GTP-RHO BINDING PROTEIN 1:
846	13902	28680	6.48	2.0E-67	AW1816405.1	EST_HUMAN	am18b07.s1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:1541365 3'
1107	14151		1.26	2.0E-67	AF167480.1	NT	hw16g09.x1 NCL_CGAP_L124 Homo sapiens cDNA clone IMAGE:3183196 3' similar to WP:F23H11.9
1901	14925	27922	1.28	2.0E-67	BE303037.1	EST_HUMAN	CE08617:
1901	14925	27923	1.26	2.0E-67	BE303037.1	EST_HUMAN	QV4-ST0234-181189-037-405 ST0234 Homo sapiens cDNA
2251	15265	28291	0.9	2.0E-67	11422846	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a, 2, 3, and 4
2251	15265	28282	0.9	2.0E-67	11422846	NT	ba72g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2805976 5' similar to TR:O94892 O94892
2394	15401	28428	1.16	2.0E-67	AF309581.1	NT	KJAA0798 PROTEIN:
2438	15445	28463	1.38	2.0E-67	4758796	NT	ba72g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2805976 5' similar to TR:O94892 O94892
3481	16527	28452	3.78	2.0E-67	AA625755.1	EST_HUMAN	KJAA0798 PROTEIN:
4027	17065	28688	2.7	2.0E-67	AL163300.2	NT	ba72g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2805976 5' similar to TR:O94892 O94892
							KJAA0798 PROTEIN:
							Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
							Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
							Homo sapiens KRAB zinc finger protein ZFQR mRNA, complete cds
							Homo sapiens developmentally regulated GTP-binding protein 1 (DRG1), mRNA
							zu01g01.s1 Soares_besla_NHT Homo sapiens cDNA clone IMAGE:746392 3'
							Homo sapiens chromosome 21 segment HS21C100

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6190	19284	32500	0.77	2.0E-67	AL049784.1	NT	Novel human gene mapping to chromosome 13
6247	19320	32550	4.91	2.0E-67	BF240758.1	EST_HUMAN	601875351F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4091893 5'
6428	19494	32748	2.19	2.0E-67	AB051783.1	NT	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
6428	19494	32747	2.19	2.0E-67	AB051783.1	NT	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
6788	19852	33137	0.77	2.0E-67	AL120542.1	EST_HUMAN	DKFZp761A228_r1 761 (synonym: ham2) Homo sapiens cDNA clone DKFZp761A228 5'
8904	21870	35295	0.83	2.0E-67	AA334609.1	EST_HUMAN	EST38850 Embryo, 9 week Homo sapiens cDNA 5' end similar to cerebellin
8904	21870	35296	0.83	2.0E-67	AA334609.1	EST_HUMAN	EST38850 Embryo, 9 week Homo sapiens cDNA 5' end similar to cerebellin
8348	22313	35737	1.11	2.0E-67	AW602835.1	EST_HUMAN	RC4-BT0568-170100-011-c07 BT0568 Homo sapiens cDNA
9348	22313	35738	1.11	2.0E-67	AW602835.1	EST_HUMAN	RC4-BT0568-170100-011-c07 BT0568 Homo sapiens cDNA
9826	22809	36261	1.06	2.0E-67	AV731333.1	EST_HUMAN	AV731333 HTF Homo sapiens cDNA clone HTFARD03 5'
10067	22894	36463	1.01	2.0E-67	AW293824.1	EST_HUMAN	UHT-B12-attn-e-10-q-U1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727283 3'
10884	23904	37418	0.44	2.0E-67	AA928089.1	EST_HUMAN	on88b07.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1563541 3'
11249	24202	37724	1.47	2.0E-67	BF685788.1	EST_HUMAN	602140470F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4301705 5'
11390	24327	37856	1.58	2.0E-67	BF034485.1	EST_HUMAN	601455262F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3858975 5'
11398	26011		2.51	2.0E-67	11436448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
11582	24502	39080	1.93	2.0E-67	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
11794	25939	37461	1.63	2.0E-67	BF377169.1	EST_HUMAN	PM2-TN0103-040900-001-c02 TN0103 Homo sapiens cDNA
12808	25434	31741	1.73	2.0E-67	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
263	13350	26276	1.82	1.0E-67	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resist-11, Alzheimer disease) (APP), mRNA
708	13771	26709	1.34	1.0E-67	AA702784.1	EST_HUMAN	260b04.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
10587	23509	37001	0.44	1.0E-67	Q93075	SWISSPROT	HYPOTHETICAL PROTEIN KIAA0218
10587	23509	37002	0.44	1.0E-67	Q93075	SWISSPROT	HYPOTHETICAL PROTEIN KIAA0218
2186	15201	26221	2.37	8.0E-68	BE870732.1	EST_HUMAN	601448558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3852254 5'
3883	16923	28831	4.25	8.0E-68	AA209456.1	EST_HUMAN	zq82h10.1r1 Stratiene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07580 SAV PROTEIN ;
3883	16923	28832	4.25	8.0E-68	AA209456.1	EST_HUMAN	zq82h10.1r1 Stratiene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07580 SAV PROTEIN ;
8438	21407	34819	0.57	7.0E-68	AB10605.1	EST_HUMAN	wb89603.s1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2312660 3'
10816	23737	37240	2.48	6.0E-68	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
12811	25438		2.18	6.0E-68	BE612554.1	EST_HUMAN	601452067F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855761 5'
13058	25694	31686	1.52	6.0E-68	BF310675.1	EST_HUMAN	601894635F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124144 5'
803	15815	26810	0.68	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
803	15815	26811	0.68	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
820	13878	26827	4.72	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
820	13878	26828	4.72	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
2791	15783	28798	1.23	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3162	16218	29133	3.08	5.0E-08	AB037852.1	NT	Homo sapiens mRNA for KIAA1431 protein, partial cds
4210	17239		0.8	5.0E-08	4823667	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
4518	17543	30429	0.75	5.0E-08	AL157845.1	EST_HUMAN	DKFZp547D207_j1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D207 5'
6889	19041	33236	0.87	5.0E-08	7019512	NT	Homo sapiens RAB3A interacting protein (rab33)-like 1 (RAB33L1), mRNA
6889	19041	33237	0.87	5.0E-08	7019512	NT	Homo sapiens RAB3A interacting protein (rab33)-like 1 (RAB33L1), mRNA
2532	15535	28555	0.94	4.0E-08	11421388	NT	Homo sapiens transcription factor NRF (NRF), mRNA
2532	15535	28556	0.94	4.0E-08	11421388	NT	Homo sapiens transcription factor NRF (NRF), mRNA
5011	18026		7.83	4.0E-08	P04408	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE, LIVER
6075	19156	32368	0.87	4.0E-08	AF157063.1	NT	Homo sapiens sedlin (SEDL) gene, exon 4
6839	20163	33485	5.6	4.0E-08	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
6839	20163	33486	5.6	4.0E-08	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
7948	20887	34278	0.72	4.0E-08	7681683	NT	Homo sapiens DKFZP566L0724 protein (DKFZP566L0724), mRNA
8395	22360	35790	5.91	4.0E-08	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
8395	22360	35791	5.91	4.0E-08	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
9533	22496	35944	2.83	4.0E-08	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
11345	24295	37821	1.55	4.0E-08	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
11345	24295	37822	1.55	4.0E-08	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
3673	16716	28630	5.02	3.0E-08	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
5289	18303	31164	0.83	3.0E-08	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
9812	21135		5.47	3.0E-08	A1342323.1	EST_HUMAN	q88h02x1 Soares fetal lung_NHL19W Homo sapiens cDNA clone IMAGE:1950291 3' similar to contains
10868	23798	37268	2.01	3.0E-08	F28784.1	EST_HUMAN	THRL2 THR repetitive element;
13012	25725		1.99	3.0E-08	AW939485.1	EST_HUMAN	HSPO16178 HMs Homo sapiens cDNA clone s3000023D09
2673	18321		27.9	2.0E-08	D00522.1	NT	QV1-DT0072-010200-066-H06 DT0072 Homo sapiens cDNA
4055	17092	28687	0.76	2.0E-08	BE675768.1	EST_HUMAN	Cricetus longicaudatus mRNA for EF-1 alpha, complete cds
4708	17728	30623	1.86	2.0E-08	AB006681.1	NT	TH1502.x1 NC1_CGAP_CL11 Homo sapiens cDNA clone IMAGE:3294747 3' similar to TR:O80828 O80828
7059	20061		9.21	2.0E-08	R45088.1	EST_HUMAN	HYPOTHETICAL 88.8 KD PROTEIN.;
7265	20000	33289	4.51	2.0E-08	BIF03316.1	EST_HUMAN	Homo sapiens gene for activin receptor type IIB, complete cds
							Y958g04.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34898 3'
							601458514F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862034 5'
							Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 8
7425	20392		0.61	2.0E-08	11525737	NT	(GalNAc-7S) (GALNT8), mRNA

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7595	20556	33316	0.61	2.0E-68	BF336745.1	EST_HUMAN	IL3-CT0634-180900-273-A01 CT0634 Homo sapiens cDNA
8301	22268	35698	0.67	2.0E-68	Q05859	SWISSPROT	FORMIN 4 (LIMB DEFORMITY PROTEIN)
80	13196	26120	0.75	1.0E-68	4506222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
286	13390	26318	17.65	1.0E-68	AW818405.1	EST_HUMAN	QV4-ST0234-181109-037-405 ST0234 Homo sapiens cDNA
2263	15277	28301	1.27	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2263	15277	28302	1.27	1.0E-68	AB011148.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2767	15759	28781	1.04	1.0E-68	AW451832.1	EST_HUMAN	UHH-B13-alk-f01-0-JLst NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2737272 3'
4037	17075	29975	1.01	1.0E-68	BE286032.1	EST_HUMAN	601177002F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3632344 5'
5066	18076	30957	0.68	1.0E-68	AA807343.1	EST_HUMAN	ak47g12.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460518 3'
5395	18498	31376	1.6	1.0E-68	7652349	NT	Homo sapiens cell recognition molecule Casp2 (KIAA0868), mRNA
7938	20880	34270	0.96	1.0E-68	11436716	NT	Homo sapiens sentrinSUMO-specific protease (SENIP1), mRNA
11198	24163	37884	1.48	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
11198	24163	37885	1.48	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
11250	24203	37725	3.37	1.0E-68	L79416.1	NT	Homo sapiens MIF2 suppressor (HSM13) mRNA, complete cds
11631	24598	38131	2.13	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKGSH) gene, exon 4-5
11631	24598	38132	2.13	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKGSH) gene, exon 4-5
11975	24852	38449	1.73	1.0E-68	11418431	NT	Homo sapiens CGL-78 protein (LOC51632), mRNA
11975	24852	38450	1.73	1.0E-68	11418431	NT	Homo sapiens CGL-78 protein (LOC51632), mRNA
12780	13186	26120	2.19	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
13005	25886	31419	2.07	1.0E-68	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
13067	25593		1.61	1.0E-68	11418213	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
22	13142	26040	5.15	9.0E-69	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
22	13142	26041	5.15	9.0E-69	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1029	14076	27025	0.76	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1029	14075	27026	0.76	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
4155	17186	30074	0.97	9.0E-69	4757867	NT	Homo sapiens v-rat murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
4175	17206	30082	1.02	9.0E-69	4504010	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), regulatory (30.8kD) (GLCLR) mRNA
5241	18249	31120	0.93	9.0E-69	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
11236	24189		5.51	9.0E-69	AU117241.1	EST_HUMAN	AU117241 HEMBA1 Homo sapiens cDNA clone HEMBA1000688 5'
3367	16446		1.77	8.0E-69	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
8487	18552	32802	5.65	7.0E-69	9068912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
8195	21165	34574	15.42	8.0E-69	AJ182764.1	EST_HUMAN	qe82h01.x1 Soares_fetal_lung_NbHL10W Homo sapiens cDNA clone IMAGE:1743601 3' similar to gb:L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
8195	21165	34575	15.42	6.0E-69	A192764.1	EST_HUMAN	q622f01.x1 Soares_fetal_lung_NIHIL19W Homo sapiens cDNA clone IMAGE:1743601 3' similar to
9325	22280	35720	1.04	5.0E-69	AAB26039.1	EST_HUMAN	gbL11598 60S RIBOSOMAL PROTEIN L18 (HUMAN);
521	13592		1.27	4.0E-69	A1873630.1	EST_HUMAN	cd80a03.s1 NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1372300 3'
5655	25040	32130	1.38	4.0E-69	BE561068.1	EST_HUMAN	wir26h11.x1 NC1_CGAP_U4 Homo sapiens cDNA clone IMAGE:2437125 3'
5943	19029	32223	5	4.0E-69	A1784073.1	EST_HUMAN	601344705F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677641 5'
6783	19838	33122	2.77	4.0E-69	4557732	NT	wt57608.x1 NC1_CGAP_K1411 Homo sapiens cDNA clone IMAGE:2384619 3' similar to TRC055137
6783	19838	33123	2.77	4.0E-69	4557732	NT	O55137 ACYL-COA THIOESTERASE.;
9285	22231	35662	0.55	4.0E-69	AU119834.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
386	13488	28432	3.2	3.0E-69	BE258012.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
614	13679	26595	2.56	3.0E-69	AF221712.1	NT	AU119834 HEMBA1 Homo sapiens cDNA clone HEMBA1006283 5'
2386	15394		0.93	3.0E-69	5728910	NT	60111037F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3351352 5'
4618	17639		0.93	3.0E-69	T86234.1	EST_HUMAN	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
5285	17638		0.93	3.0E-69	T86234.1	EST_HUMAN	Homo sapiens lymphatic vessel endothelial hyaluronan receptor 1 (LYVE-1) mRNA
5314	18330	38613	1.79	3.0E-69	11418185	NT	ye48h04.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121016 5'
5712	18808	31883	0.54	3.0E-69	U14178.1	NT	ye48h04.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121015 5'
6872	20195		0.58	3.0E-69	AJ277557.1	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), mRNA
7038	18370	31257	0.6	3.0E-69	11426786	NT	Human type II IL-1 receptor gene, exon 1B
7597	20558	33918	0.82	3.0E-69	AF095703.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
7651	20611	33977	1.52	3.0E-69	U62351.1	NT	Homo sapiens sperm surface protein (HSS), mRNA
7800	20752	34128	8.4	3.0E-69	AF268075.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
8715	21683	35111	1.05	3.0E-69	AW138948.1	EST_HUMAN	Homo sapiens arm-repeat protein NPRAP/neurjungin (CTNND2) mRNA, partial cds
9120	22086		1.38	3.0E-69	AA376398.1	EST_HUMAN	Homo sapiens TRAF8-binding protein T8BP mRNA, complete cds
9328	22283	35722	0.5	3.0E-69	8923248	NT	UJ-H-BIT-acw-q-01-0-UI.s1 NC1_CGAP_Su63 Homo sapiens cDNA clone IMAGE:2715940 3'
9788	22709	36164	1.94	3.0E-69	X1323.1	NT	ESTT88807 HSC172 cells II Homo sapiens cDNA 5' and similar to similar to ribosomal protein S18
9891	22844	36301	59.4	3.0E-69	X06233.1	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
10188	23113	36597	0.71	3.0E-69	5730036	NT	HL sapiens mRNA for N-acetylglucosaminide-(beta 1-4)-galactosyltransferase
11003	23989	37483	3.28	3.0E-69	11432120	NT	Human mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor (MIF)-related protein
11180	24146		12.51	3.0E-69	AA376398.1	EST_HUMAN	Homo sapiens SEC10 (S. cerevisiae)-like 1 (SEC10L1), mRNA
12300	25111		7.34	3.0E-69	11419157	NT	Homo sapiens ribosomal protein S15a (RPS15A), mRNA
							ESTT88807 HSC172 cells II Homo sapiens cDNA 5' and similar to similar to ribosomal protein S18
							Homo sapiens HGC8.2 protein (HGC8.2), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
128	13477	28411	1.06	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
129	13477	28412	1.06	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
404	13477	28411	4.75	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
404	13477	28412	4.75	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
1802	14928	27824	1.48	2.0E-69	BE257857.1	EST_HUMAN	601109444F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3350074 5'
2856	15916		3.8	2.0E-69	AA431157.1	EST_HUMAN	zw71g02.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781682 5'
8900	21868	35289	0.97	2.0E-69	AA114270.1	EST_HUMAN	zxm29g01.1 Stratagene pancreas (#837208) Homo sapiens cDNA clone IMAGE:527088 5'
1714	14744	27726	2.69	1.0E-69	AF053768.1	NT	Rattus norvegicus brain specific contactin-binding protein CBF90 mRNA, partial cds
5059	18069		0.73	1.0E-69	BE408094.1	EST_HUMAN	601301284F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635781 5'
6168	18243	32474	0.78	1.0E-69	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3658532 5'
6168	18243	32475	0.78	1.0E-69	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3658532 5'
6768	18812	33092	4.09	1.0E-69	AW363968.1	EST_HUMAN	QV0-TT0010-031199-045-007 TT0010 Homo sapiens cDNA
6982	20215	33544	1.4	1.0E-69	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6982	20215	33545	1.4	1.0E-69	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7011	20137	33453	2.78	1.0E-69	AB032873.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
7011	20137	33454	2.78	1.0E-69	AB032873.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
7065	20087	33398	0.62	1.0E-69	BE531007.1	EST_HUMAN	601278532F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610614 5'
7065	20087	33397	0.62	1.0E-69	BE531007.1	EST_HUMAN	601278532F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610614 5'
10534	29458	36852	4.31	1.0E-69	BE246070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10534	29458	36853	4.31	1.0E-69	BE246070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10631	23553	37053	1.48	1.0E-69	AB014807.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
10779	23700	37188	0.53	1.0E-69	BF528429.1	EST_HUMAN	602043782F1 NCI_CGAP_Bim07 Homo sapiens cDNA clone IMAGE:4181325 5'
11219	24172		2.78	1.0E-69	4504918	NT	Homo sapiens keratin 8 (KRT8) mRNA
12234	25088	38167	1.89	1.0E-69	BF125887.1	EST_HUMAN	601762802F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4025785 5'
12848	25331		6.78	1.0E-69	AB098994.1	EST_HUMAN	wf84a08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360380 3' similar to contains Alu repetitive element; contains element M1R repetitive element;
2339	15690	28370	1.61	8.0E-70	AA230303.1	EST_HUMAN	nc13412.1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008023
4401	17428	30314	2.11	8.0E-70	L77688.1	NT	Homo sapiens DGS-1 mRNA, 3' end
1830	14857	27854	2.26	7.0E-70	AA497807.1	EST_HUMAN	fm89f01.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2165305 3'
1830	14857	27855	2.26	7.0E-70	AA497807.1	EST_HUMAN	fm89f01.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2165305 3'
1947	14971	27869	1.87	7.0E-70	AA282955.1	EST_HUMAN	zt15f04.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:713239 5'
2078	15095		2.97	7.0E-70	5031888	NT	Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R) mRNA.

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4252	17281	30162	4.29	7.0E-70	4757723	NT	Homo sapiens adenylate cyclase 3 (ADCY3) mRNA
5560	18657	31602	5.30	7.0E-70	AB032398.1	NT	Homo sapiens MIST mRNA, partial cds
5560	18657	31603	5.36	7.0E-70	AB032398.1	NT	Homo sapiens MIST mRNA, partial cds
7110	20044	33346	2.98	7.0E-70	AJ000052.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
8045	20982	34379	0.74	7.0E-70	11417306	NT	Homo sapiens tlin immunoglobulin domain protein (myotilin) (TITD), mRNA
8774	21741	35162	2.43	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
8774	21741	35163	2.43	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
9072	22038	35462	4.26	7.0E-70	AB037715.1	NT	Human displacement protein (OCAAT) mRNA
9072	22038	35463	4.26	7.0E-70	AB037715.1	NT	Human displacement protein (OCAAT) mRNA
9512	22475	35919	2.79	7.0E-70	X59841.1	NT	Human PDX3 mRNA
9512	22475	35920	2.79	7.0E-70	X59841.1	NT	Human PDX3 mRNA
9780	21113	34513	3.51	7.0E-70	AF163715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
9816	21198	34542	2.05	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9816	21198	34543	2.05	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
10014	22941	39407	0.93	7.0E-70	4557624	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
10661	23583	37078	0.6	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
10661	23583	37080	0.6	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
11923	24804	38386	2.36	7.0E-70	11528819	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
11923	24804	38397	2.36	7.0E-70	11528819	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
12893	25882	31414	13.83	7.0E-70	Z00040.1	NT	Human kappa-immunoglobulin germ line pseudogene variable region (subgroup V kappa I)
13071	25895	31898	34.82	7.0E-70	Z00040.1	NT	Human kappa-immunoglobulin germ line pseudogene variable region (subgroup V kappa I)
872	13928	28886	2.38	6.0E-70	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant-II, Alzheimer disease) (APP), mRNA
2147	15183	28179	1.7	6.0E-70	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
2516	15519	28542	1.17	6.0E-70	8623889	NT	Homo sapiens CMP-N-acetylneuraminic acid synthase (LOC55907), mRNA
2559	15897	28577	1.76	5.0E-70	7682307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
2559	15897	28578	1.76	5.0E-70	7682307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
12243	23073	33266	2.52	5.0E-70	BE166034.1	EST_HUMAN	MF3-HT0487-150200-115-608 HT0487 Homo sapiens cDNA
6918	19969	33510	1.24	4.0E-70	T06037.1	EST_HUMAN	EST03828 Fetal brain, Strabagene (catf893206) Homo sapiens cDNA clone HIFBDN26
6961	20186	33510	0.78	4.0E-70	AW793228.1	EST_HUMAN	CM4-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA
6961	20186	33511	0.78	4.0E-70	AW793228.1	EST_HUMAN	CM4-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1593	14625	27698	1.56	3.0E-70	BE071796.1	EST_HUMAN	RCO-BT0522-071299-011-e12 BT0522 Homo sapiens cDNA
1593	14625	27699	1.56	3.0E-70	BE071796.1	EST_HUMAN	RCO-BT0522-071299-011-e12 BT0522 Homo sapiens cDNA
5701	18796	31970	0.63	3.0E-70	11430988	NT	Homo sapiens plakophilin 4 (PKP4), mRNA
5701	18796	31971	0.63	3.0E-70	11430988	NT	Homo sapiens plakophilin 4 (PKP4), mRNA
6055	16136	32346	1.1	3.0E-70	A1831975.1	EST_HUMAN	Wf90403.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2388006 3'
6508	16573	32826	1.27	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808 5'
6508	16573	32827	1.27	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808 5'
10497	23399	36893	0.55	3.0E-70	BE502973.1	EST_HUMAN	h281h02.x1 NCL_CGAP_L124 Homo sapiens cDNA clone IMAGE:3214419 3'
40	13160	28063	2.14	2.0E-70	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
690	13753	26880	14.23	2.0E-70	N42161.1	EST_HUMAN	Y074t0.1 Scores melanocyte 2N1b1M Homo sapiens cDNA clone IMAGE:270522 5' similar to SW-D3HL_RAT P29268 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
690	13753	26881	14.23	2.0E-70	N42161.1	EST_HUMAN	Y074t0.1 Scores melanocyte 2N1b1M Homo sapiens cDNA clone IMAGE:270522 5' similar to SW-D3HL_RAT P29268 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
706	13768	26704	1.39	2.0E-70	A1246899.1	EST_HUMAN	g051h01.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2004613 3'
1023	14069	27020	1.23	2.0E-70	8823689	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
1198	14228	27184	1.73	2.0E-70	7681983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1198	14228	27185	1.73	2.0E-70	7681983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1664	14698	27671	1.53	2.0E-70	AA180093.1	EST_HUMAN	zp45h05.11 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:612441 5' similar to TR:G1041293 G1041293 D2085.5 ;
1664	14698	27672	1.53	2.0E-70	AA180093.1	EST_HUMAN	zp45h05.11 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:612441 5' similar to TR:G1041293 G1041293 D2085.5 ;
1757	14786	27771	1.73	2.0E-70	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2328	15339		5.47	2.0E-70	AA054010.1	EST_HUMAN	zp48g04.1 Scores retina N2b-4R Homo sapiens cDNA clone IMAGE:380214 5' similar to SW:GAG_HTL1A
3641	16884	29800	1.06	2.0E-70	H37988.1	EST_HUMAN	P03345 GAG POLYPROTEIN ;
3653	16873	29774	0.86	2.0E-70	AL133207.2	NT	Yp58b04.1 Scores fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:181589 5'
4079	17114	30010	5.63	2.0E-70	IM69181.1	NT	Novel human gene mapping to chromosome X
4221	17250	30195	0.86	2.0E-70	L78810.1	NT	Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds
4221	17250	30196	0.86	2.0E-70	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
5553	18689	31658	9.14	2.0E-70	X72682.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
5553	18689	31659	9.14	2.0E-70	X72682.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
6328	18398	32840	1.1	2.0E-70	AF310105.1	NT	H. sapiens gene for schwannomin (CS8)
6790	18844	33128	3.84	2.0E-70	D12625.1	NT	H. sapiens gene for schwannomin (CS8)
6824	18878	33167	11.3	2.0E-70	AF123074.1	NT	Homo sapiens NALP1 mRNA, complete cds
							Human mRNA for NF1 protein isoform (neurofibromin isoform), complete cds
							Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6824	18678	33168	11.3	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
7190	18421	31223	1.44	2.0E-70	11422842	NT	Homo sapiens sialyltransferase 6 (N-acetylsialosaminidase alpha 2,3-sialyltransferase) (SIAT6), mRNA
7633	20593	33956	0.58	2.0E-70	AF288207.1	NT	Homo sapiens cysteinyl-tRNA synthetase mRNA, complete cds, alternatively spliced
8251	21220	34629	5.38	2.0E-70	M21741.1	NT	Human guanine nucleotide-binding protein alpha-subunit gene (G-e-alpha), exons 4 and 5
8564	21532	34952	0.45	2.0E-70	11423599	NT	Homo sapiens amylo-1,8-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), mRNA
8907	21973		0.78	2.0E-70	H47859.1	EST_HUMAN	y978g02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:183882 5'
9524	22487	35935	0.95	2.0E-70	11628355	NT	Homo sapiens dynactin p62 subunit (LOC31184), mRNA
10487	23419	36918	1.42	2.0E-70	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10983	23883	37398	0.49	2.0E-70	AB033042.1	NT	Homo sapiens mRNA for KIAA1216 protein, partial cds
11408	24352	37684	3.11	2.0E-70	8623420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
11408	24352	37685	3.11	2.0E-70	8623420	NT	Homo sapiens hypothetical protein FLJ20460 (FLJ20460), mRNA
11958	24835	38431	11.5	2.0E-70	4503520	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6) mRNA
12637	25321	31786	2.64	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12637	25321	31787	2.64	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3404	16453		3.08	1.0E-70	4507476	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGMS) mRNA
8636	22579		0.78	1.0E-70	W85795.1	EST_HUMAN	zh55g05.1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416024 5'
10158	23083		0.64	1.0E-70	AA442292.1	EST_HUMAN	z654c03.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757444 5'
11281	24231	37757	8.6	1.0E-70	AV738538.1	EST_HUMAN	AV738538.05 Homo sapiens cDNA clone C8LGB10 5'
6054	19135	32344	7.1	9.0E-71	AI143870.1	EST_HUMAN	q604f01.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
6054	19135	32345	7.1	9.0E-71	AI143870.1	EST_HUMAN	O14045 PHOSPHOTRANSFERASE ;
7231	20253	33587	1.98	9.0E-71	AI654903.1	EST_HUMAN	O14045 PHOSPHOTRANSFERASE ;
11852	20253	33587	3.67	9.0E-71	AI654903.1	EST_HUMAN	w652a05.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213
9425	22389		3.62	8.0E-71	AA171451.1	EST_HUMAN	CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
10867	23887	37398	0.45	8.0E-71	AW273820.1	EST_HUMAN	w652a05.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213
7601	20562	33923	8.17	7.0E-71	AA442230.1	EST_HUMAN	CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
							zp21d11.1.1 Stragene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:810101 5' similar to TR:G1143061 G1143061 STRAIN XA34 POL ;
							xv24d01.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2814049 3' similar to TR:O54730
							O54730 TRANSPLANTABILITY ASSOCIATED PROTEIN 1 ;
							z601h06.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:768076 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9026	21992	35412	1.61	7.0E-71	AA705457.1	EST_HUMAN	z81s06.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462228 3'
11658	24594	38188	1.76	7.0E-71	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2220	18234	28258	8.78	5.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
4145	17177	30066	1.1	5.0E-71	AW918405.1	EST_HUMAN	QV4-ST0234-181199-037-405 ST0234 Homo sapiens cDNA
5981	18068	32264	2.02	5.0E-71	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6819	18873	33182	1.15	5.0E-71	11641408	NT	Homo sapiens keratin, hair, acidic, 7 (KRT1A7), mRNA
7105	20039	33341	0.72	5.0E-71	7682209	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
7167	18398	31243	0.84	5.0E-71	AB033108.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
7197	18398	31244	0.84	5.0E-71	AB033108.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
7353	20323	33671	0.69	5.0E-71	11431580	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7753	20708	34075	1.82	5.0E-71	MS8108.1	NT	Human neurofibromatosis protein type 1 mRNA, 3' end of cds
7974	20913	34304	0.84	5.0E-71	11528445	NT	Homo sapiens MAGUK protein p57; Protein Associated with Lins 2 (LOC51678), mRNA
8007	20945	34340	22.85	5.0E-71	AF072810.1	NT	Homo sapiens transcription factor WSTF mRNA, complete cds
8868	21835	35256	0.61	5.0E-71	5463777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFRKB) mRNA
8868	21835	35257	0.61	5.0E-71	5453777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFRKB) mRNA
10271	23186		2.45	5.0E-71	X13467.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
11325	24275	37803	7.5	5.0E-71	11438514	NT	Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP), mRNA
11525	24468	38020	2.01	5.0E-71	11438069	NT	Homo sapiens similar to hypothetical protein FLJ20163 (H. sapiens) (LOC83325), mRNA
12168	26043	38624	1.81	5.0E-71	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
104	13220	28145	1.04	4.0E-71	4507682	NT	Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10) mRNA
350	13439	28363	56.4	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
350	13439	28364	56.4	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
2897	15856	28873	1.9	4.0E-71	4505880	NT	Homo sapiens plasminogen (PLG) mRNA
4459	17485	30372	4.75	4.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
6022	18036	30821	6.04	4.0E-71	7857602	NT	Homo sapiens putative home-binding protein (SOUL), mRNA
6358	21337		1.34	3.0E-71	AU135734.1	EST_HUMAN	AU135734 PLACE1 Homo sapiens cDNA clone PLACE1002776 5'
11051	24014	37538	2.84	3.0E-71	AA557683.1	EST_HUMAN	n46h10.s1 NC1_OGAP_P4 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.3 PTR5 repetitive element;
1254	14271	27231	5.58	2.0E-71	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
5393	18498	31374	8.35	2.0E-71	D87482.1	NT	Homo sapiens mRNA for KIAA0272 gene, partial cds
5393	18498	31375	8.35	2.0E-71	D87482.1	NT	Human mRNA for KIAA0272 gene, partial cds
7160	18392	31236	0.57	2.0E-71	AL042439.1	EST_HUMAN	DKFZp434D1721_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D1721 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9359	22324	35762	0.5	2.0E-71	BF185585.1	EST_HUMAN	7n5c11.x1 NC1 CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3571221 3' similar to TR:Q9Z165
10950	23870	37382	4.19	2.0E-71	AF095703.1	NT	Q8Z165 PUTATIVE FOUR REPEAT ION CHANNEL ; Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10950	23870	37383	4.19	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
11053	24016	37539	3.41	2.0E-71	BE018477.1	EST_HUMAN	b581a06.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048754 5' similar to SW:R238_HUMAN
11907	24788	38377	2.27	2.0E-71	R56628.1	EST_HUMAN	P54727 UV EXCISION REPAIR PROTEIN RAD23 HOMOLOG B ;
12315	25121		7.13	2.0E-71	T06489.1	EST_HUMAN	y177c11.1 Scores breast 2NdrHst Homo sapiens cDNA clone IMAGE:154772 5'
639	13705	26626					ye43e09.1 Scores fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:120520 5'
940	13963	26945	1.69	1.0E-71	A077927.1	EST_HUMAN	cy15c03.s1 Scores_sarcomat_fibroblasts_NdrHSF Homo sapiens cDNA clone IMAGE:1665918 3' similar to contains LOR1.62 LOR1 repetitive element ;
1102	14146	27098	1.68	1.0E-71	7706281	NT	Homo sapiens neuronal cell death-related protein (LOC51616), mRNA
1343	14378	27347	6.21	1.0E-71	AF205930.1	NT	Homo sapiens disabled-2 gene, exon 2 through 15 and complete cds
2094	15111	28131	9.86	1.0E-71	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2094	15111	28132	1.29	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2703	15699	28714	1.29	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3610	16655	29572	4.81	1.0E-71	7657183	NT	Homo sapiens hairyenhancer-of-split related with YRPW motif-like (HEYL), mRNA
3610	16655	29573	5.11	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3682	16705	29610	5.11	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3682	16705	29610	1.18	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3764	16768	29707	1.18	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
4497	17522	30409	1.56	1.0E-71	AF218904.1	NT	Homo sapiens atractin precursor (ATRN) gene, exon 19
4622	17643	30531	2.16	1.0E-71	D28478.1	NT	Homo sapiens atractin precursor (ATRN) gene, complete cds
6806	19658	33255	0.68	1.0E-71	H23178.1	EST_HUMAN	Human mRNA for KIAA0045 gene, complete cds ym55h10.1 Scores infant brain 1N1B Homo sapiens cDNA clone IMAGE:52528 5'
7292	20264	33598					Homo sapiens GCH5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCH5L2), mRNA
7533	20496	33957	1.38	1.0E-71	11426182	NT	Homo sapiens mRNA for KIAA0559 protein, partial cds
8466	21454	34971	1.28	1.0E-71	AB011131.1	NT	Homo sapiens GAGL79 mRNA, partial cds
8509	21477	34980	12.67	1.0E-71	U80753.1	NT	Homo sapiens glypican-6 (GPC6) mRNA, complete cds
8789	21756	35177	0.76	1.0E-71	AF105267.1	NT	Homo sapiens myomesin (M-protein) 2 (16SKD) (MYOM2), mRNA
			2.14	1.0E-71	11425430	NT	Homo sapiens myomesin (M-protein) 2 (16SKD) (MYOM2), mRNA
			4.49	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8780	21758	35178	4.49	1.0E-71	8822811	NT	Homo sapiens hypothetical protein FLJ10898 (FLJ10898), mRNA
9504	22548	38897	0.83	1.0E-71	572393.1	NT	CSNK2A1-casein kinase II (CKII) subunit alpha [human, Genomic, 18882 nt]
10387	23280	38787	9.49	1.0E-71	AY007643.1	NT	Homo sapiens cytochrome c oxidase subunit VIIa-related protein gene, complete cds
10428	23350		3.08	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10804	23824	37336	1.52	1.0E-71	11433142	NT	Homo sapiens activated leukocyte cell adhesion molecule (ALCAM), mRNA
11137	24097		2.43	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
11228	24181	37708	2.12	1.0E-71	11418803	NT	Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA
11481	24424	37673	2.27	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
11481	24424	37874	2.27	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
12581	25349		3.13	1.0E-71	AB011398.1	NT	Homo sapiens gene for AF-8, complete cds
407	13480	26414	1.23	9.0E-72	AB857635.1	EST_HUMAN	wk95g03.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR-O88705 O88705
407	13480	26415	1.23	9.0E-72	AB857635.1	EST_HUMAN	HYPOTHETICAL 98.6 KD PROTEIN. contains Alu repetitive element
6232	18306	32538	0.89	8.0E-72	BF035752.1	EST_HUMAN	wk95g03.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR-O88705 O88705
11444	24387	37827	2.55	8.0E-72	11424480	NT	HYPOTHETICAL 98.6 KD PROTEIN. contains Alu repetitive element
11444	24387	37828	2.55	8.0E-72	11424480	NT	601458747F1 NIH_MGC 66 Homo sapiens cDNA clone IMAGE:3862451 5'
11444	24387	37829	2.55	8.0E-72	11424480	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
4139	17170	30058	1.24	7.0E-72	4501868	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
4139	17170	30057	1.24	7.0E-72	4501868	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
4139	17170	30058	1.24	7.0E-72	4501868	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
7331	20302	33846	2.87	7.0E-72	S41694.1	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
12800	25428		1.52	7.0E-72	F26258.1	EST_HUMAN	[pseudogene] PTMAP2=proboscis alpha [human, Genomic, 1192 nt, segment 2 of 3]
8727	21695		4.9	6.0E-72	AL163246.2	NT	HSPD13670 HM3 Homo sapiens cDNA clone s4000051G02
65	13184	28102	4.86	5.0E-72	BF333707.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21G046
65	13184	28103	4.86	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	13184	28102	13.05	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	13184	28103	13.05	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
1141	14184		2.75	5.0E-72	L11645.1	NT	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
7138	20114	33427	1.65	5.0E-72	AU128594.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
							AU128594 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8183	21101	34500	0.55	5.0E-72	AA316632.1	EST_HUMAN	EST188312 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to similar to FAC1
9128	22085	35523	4.14	5.0E-72	AW161274.1	EST_HUMAN	au80-c03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782684 5' similar to
10320	23244	38724	0.58	5.0E-72	AV724632.1	EST_HUMAN	TR:Q88785 Q88785 HYPOTHETICAL 32.4 KD PROTEIN ; contains element MSF1 repetitive element ;
11573	24511	39067	2.74	5.0E-72	BF331571.1	EST_HUMAN	AV724632 HTB Homo sapiens cDNA clone HTBAK01 5'
11573	24511	39068	2.74	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT0598-010800-005-405 BT0598 Homo sapiens cDNA
12389	28929		2.52	5.0E-72	BE928845.1	EST_HUMAN	MR4-BT0598-010800-005-405 BT0598 Homo sapiens cDNA
4880	17877		1.12	4.0E-72	11034844	NT	QV1-BT0632-280800-342-410 BT0632 Homo sapiens cDNA
5540	18637	31677	0.75	4.0E-72	AF170025.1	NT	Homo sapiens hypothetical protein d1057B20.2 (DJ1057B20.2), mRNA
6709	19785	33045	0.83	4.0E-72	T87947.1	EST_HUMAN	Homo sapiens zinc finger protein ZFP-95 (ZFP95) mRNA, alternatively spliced, complete cds
7639	20589	33863	1.28	4.0E-72	5723887	NT	y833d01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to
10143	23089	36545	1.24	4.0E-72	8823688	NT	SP:AA4282 AA4282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
10759	23679	37174	0.49	4.0E-72	AW836230.1	EST_HUMAN	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
10759	23679	37175	0.49	4.0E-72	AW836230.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
10786	23707	37208	1.24	4.0E-72	A1248796.1	EST_HUMAN	RC3-LT0023-200100-012-411 LT0023 Homo sapiens cDNA
11616	24554	38115	1.54	4.0E-72	AA465388.1	EST_HUMAN	RC3-LT0023-200100-012-411 LT0023 Homo sapiens cDNA
11616	24554	38116	1.54	4.0E-72	AA465388.1	EST_HUMAN	q167c02.x1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849730 3' similar to
11857	24739	38324	5.09	4.0E-72	H79421.1	EST_HUMAN	TR:Q14498 Q14498 SPLICING FACTOR, [1] ; contains Alu repetitive element; contains element L1 repetitive element ;
11888	24865	38461	1.72	4.0E-72	T81910.1	EST_HUMAN	aa23109.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814121 3' similar to SW:CPTR_FLAPR
12728	25382	31748	4.28	4.0E-72	AJ277546.2	NT	P49131 CHLOROPLAST TRIOSE PHOSPHATE TRANSLOCATOR PRECURSOR ;
21	13141	26039	1.89	3.0E-72	5031976	NT	aa23109.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814121 3' similar to SW:CPTR_FLAPR
904	13959		1.23	3.0E-72	AA723823.1	EST_HUMAN	P49131 CHLOROPLAST TRIOSE PHOSPHATE TRANSLOCATOR PRECURSOR ;
1159	14201	27152	5.57	3.0E-72	U16306.1	NT	y128d03.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:235084 5'
1159	14201	27153	5.57	3.0E-72	U16306.1	NT	y229d09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109848 3'
							Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
							Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
							ah53a08.s1 Soares testis NHT Homo sapiens cDNA clone 1310280 3'
							Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
							Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1198	14238	27193	0.71	3.0E-72	U80228.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1198	14238	27194	0.71	3.0E-72	U80228.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1523	14555	27528	1.45	3.0E-72	BE242161.1	EST_HUMAN	TCAAP1E1252 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project-TCAA Homo sapiens cDNA clone TCAAP1252
3090	16148	28062	13.29	3.0E-72	AJ228043.1	NT	Homo sapiens 858 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
3292	16345	28285	2.41	3.0E-72	8823548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
3836	16876	28778	2.52	3.0E-72	S77589.1	NT	TOR V delta 2-C alpha =T-cell receptor delta and C alpha fusion gene (alternatively spliced, splice junction)
4576	17568	30482	3.77	3.0E-72	11416108	NT	[human, precursor B-cell line REH, mRNA Partial, 211 nt]
4800	17817	30710	1.31	3.0E-72	AF167572.1	NT	Homo sapiens hypothetical protein (FLJ11127), mRNA
4800	17817	30711	1.31	3.0E-72	AF167572.1	NT	Homo sapiens protein methyltransferase (JBP1) mRNA, complete cds
5149	18188	31037	1.02	3.0E-72	AW858677.1	EST_HUMAN	Homo sapiens protein methyltransferase (JBP1) mRNA, complete cds
5598	18684		1.08	3.0E-72	4780093	NT	EST371747 MAGE resequences, MAGF Homo sapiens cDNA
6092	19171	32386	1.91	3.0E-72	AF073967.1	NT	Homo sapiens semaphorin W (SEMAW) mRNA
6092	19171	32387	1.91	3.0E-72	AF073967.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6280	19362	32600	4.78	3.0E-72	AB028004.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6290	19362	32601	4.78	3.0E-72	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6767	19821	33103	3.89	3.0E-72	4826987	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7838	20765	34160	1.87	3.0E-72	U80017.1	NT	Homo sapiens ribosomal protein L3-like (RPL3L) mRNA
8516	21484	34898	1.07	3.0E-72	5031892	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
10787	23718	37220	7.09	3.0E-72	X08289.1	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA
11912	24783	38383	3.23	3.0E-72	11424091	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
11912	24783	38384	3.23	3.0E-72	11424091	NT	Homo sapiens CD37 antigen (CD37), mRNA
12078	24950	38545	3.56	3.0E-72	AF190864.1	NT	Homo sapiens CD37 antigen (CD37), mRNA
6069	19150	32362	1.53	2.0E-72	11426671	NT	Homo sapiens ADP-ribosylation factor binding protein GGA3 (GGA3) mRNA, complete cds
9451	22415	35852	0.62	2.0E-72	BF308560.1	EST_HUMAN	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2), mRNA
9451	22415	35853	0.62	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
11092	24052	37575	2.4	2.0E-72	AA789277.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
12726	25379	31745	6.47	2.0E-72	AF182714.1	NT	aj28609.at Soares testis NIH Homo sapiens cDNA clone 1391609 3' similar to gb:U02067 H.sapiens mRNA for 7SL RNA pseudogene (HUMAN);
5861	18950	32136	3.76	1.0E-72	7857676	NT	Rattus norvegicus putative phosphatidylcholine transferase translocator mRNA, complete cds
6711	19767	33046	1.24	1.0E-72	11321578	NT	Homo sapiens vacuolar protein sorting 41 (yeast homolog) (VPS41), mRNA
							Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6711	19767	33047	1.24	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6788	25688	33128	1.3	1.0E-72	AV751818.1	EST_HUMAN	AV751818 NPD Homo sapiens cDNA clone NPD4E11 5'
7889	20842	34224	3.72	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
7899	20842	34225	3.72	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
8949	22876	36338	7.79	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SG2) mRNA, complete cds
8949	22876	36339	7.79	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SG2) mRNA, complete cds
1455	14488	27483	1.53	9.0E-73	AW374868.1	EST_HUMAN	MFR0-CT0063-071099-002-h11 CT0063 Homo sapiens cDNA
6158	18231	32482	0.94	9.0E-73	11825883	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) (MPP3), mRNA
11297	24247		18.46	9.0E-73	11424089	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
1039	14094	27035	0.88	8.0E-73	AW071755.1	EST_HUMAN	ws5508.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2501088 3' similar to TR:Q58050
5060	18766	31824	0.79	8.0E-73	4505788	NT	Q59050 HYPOTHETICAL PROTEIN MJ1688 ;
6724	19780	33059	5.01	8.0E-73	11428469	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
8432	21401	34814	2.3	8.0E-73	AF113128.1	NT	Homo sapiens lysosome homolog (LOC57151), mRNA
							Homo sapiens vacuolar ATPase isoform VA68 mRNA, complete cds
9708	22881	36117	7.24	8.0E-73	BE018800.1	EST_HUMAN	bb62a08.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030034 5' similar to gb:XD4068_cds1 ACTIN, CYTOPLASMIC 2 (HUMAN); gb:M21485 Mouse cytoskeletal gamma-actin mRNA, complete cds (MOUSE);
10087	23023	36487	2.34	8.0E-73	11528037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
10087	23023	36488	2.34	8.0E-73	11528037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
12010	24867	38483	3.54	8.0E-73	AF084520.1	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 mRNA, complete cds
12785	25418	31735	3.45	8.0E-73	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (GZ2P1), mRNA
1138	14179	27130	1.3	7.0E-73	8823280	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3312	16365	28285	1	7.0E-73	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
4981	17990		1.74	7.0E-73	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
159	13282		2.28	6.0E-73	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
7378	20348	33689	3.58	8.0E-73	BE166574.1	EST_HUMAN	QV0-HT0494-020300-137-403 HT0494 Homo sapiens cDNA
5326	18432	31184	2.11	4.0E-73	11422159	NT	Homo sapiens HELG protein (FAM44A1), mRNA
1344	14378	27348	1.18	3.0E-73	AW843788.1	EST_HUMAN	CM0-CN0044-260100-164-08 CN0044 Homo sapiens cDNA
1879	14804	27804	1.34	3.0E-73	11435913	NT	Homo sapiens heparin-binding protein (HBP), mRNA
1879	14904	27805	1.34	3.0E-73	11435913	NT	Homo sapiens heparin-binding protein (HBP), mRNA
6856	19009	33204	0.86	3.0E-73	AA138403.1	EST_HUMAN	zn95a04.s1 Stragene fetal retina 837202 Homo sapiens cDNA clone IMAGE:566950 3' similar to gb:Z23084_cds1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN G (HUMAN);
9111	22077	35503	0.54	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9111	22077	35504	0.54	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
11047	24011		1.65	3.0E-73	X98680.1	NT	H. sapiens SH3GLP2 pseudogene, 5' end
13017	25567		1.35	3.0E-73	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
13021	25569		1.97	3.0E-73	AW898081.1	EST_HUMAN	RC3-NIN0068-270400-011-c04 NN0068 Homo sapiens cDNA
852	13908	26868	1.9	2.0E-73	AF139897.1	NT	Homo sapiens BASS1 (BASS1) mRNA, partial cds
1953	14955		2.95	2.0E-73	AW898081.1	EST_HUMAN	RC3-NIN0068-270400-011-c04 NN0068 Homo sapiens cDNA
2309	15318		1.58	2.0E-73	U01317.1	NT	Human beta globin region on chromosome 11
3166	16251	29170	3.89	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3561	16807	29527	0.77	2.0E-73	7669639	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
3561	16907	29528	0.77	2.0E-73	7669639	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
6577	19637	32802	0.7	2.0E-73	AF086824.1	NT	Mus musculus rho/rao-interacting citron kinase (Crik) mRNA, complete cds
6577	19637	32803	0.7	2.0E-73	AF086824.1	NT	Mus musculus rho/rao-interacting citron kinase (Crik) mRNA, complete cds
6827	19885	32884	6.38	2.0E-73	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6859	19911	33208	1.52	2.0E-73	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
6859	19911	33207	1.52	2.0E-73	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
8092	21028	34427	0.59	2.0E-73	MB04048.1	NT	Human peripheral myelin protein 22 mRNA, complete cds
8099	21035	34435	0.77	2.0E-73	AB037750.1	NT	Homo sapiens mRNA for KIAA1329 protein, partial cds
9890	22843	36299	0.55	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
9890	22843	36300	0.55	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
10788	23709	37211	1.12	2.0E-73	4504168	NT	Homo sapiens glutathione synthetase (GSS) mRNA
10863	23783	37284	1.69	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10863	23783	37285	1.69	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
11107	24067	37589	1.49	2.0E-73	11431598	NT	Homo sapiens KIAA1080 protein; G-actin-associated, gamma-actinin ear containing, ARF-binding protein 2 (KIAA1080), mRNA
11395	24341	37672	2.64	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
11395	24341	37673	2.64	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
11420	24364	37699	1.81	2.0E-73	AB028982.1	NT	Homo sapiens mRNA for KIAA1059 protein, partial cds
12681	14885		1.81	2.0E-73	AW898081.1	EST_HUMAN	RC3-NIN0068-270400-011-c04 NN0068 Homo sapiens cDNA
1788	14827	27614	2.81	1.0E-73	AU121585.1	EST_HUMAN	AU121585 MAMMA1 Homo sapiens cDNA clone MAMMA1000490 5'
6495	19559	32810	1.2	1.0E-73	BE151283.1	EST_HUMAN	OM1-HT0282-111189-042-h10 HT0282 Homo sapiens cDNA
9857	22793	36244	1.47	1.0E-73	AU147427.1	EST_HUMAN	qg61b07.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839637 5' similar to contains element MER22 repetitive element;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11779	23834	37455	2.1	1.0E-73	BE385477.1	EST_HUMAN	60127607F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3617105 5'
742	13803	26742	1.47	8.0E-74	4557428	NT	Homo sapiens CD39-like 4 (CD39L4) mRNA
6021	19104	32308	1.84	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rat, brain, mRNA, 3429 nt]
6021	19104	32307	1.84	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rat, brain, mRNA, 3429 nt]
1906	14987	27889	4.43	7.0E-74	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
3339	16380	28311	2.01	7.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9598	22602	36051	2.25	7.0E-74	BE967432.1	EST_HUMAN	601649284F1 NIH_MGC_73 Homo sapiens cDNA clone IMAGE:3632897 5'
12784	26417	31734	4.84	7.0E-74	BE266305.1	EST_HUMAN	601191827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535855 5'
1124	14168	27120	5.19	8.0E-74	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
1631	14684	27639	1.03	8.0E-74	AW263177.1	EST_HUMAN	xn78q07.x1 Scores NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700636 3'
2324	15335	28357	7.92	8.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2324	15335	28358	7.92	8.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2875	15834	28852	1.12	8.0E-74	AW014039.1	EST_HUMAN	U1-H-B10-east-h-03-Q-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708986 3'
2875	15834	28853	1.12	8.0E-74	AW014039.1	EST_HUMAN	U1-H-B10-east-h-03-Q-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708986 3'
3726	16768	28679	1.28	8.0E-74	BE048846.1	EST_HUMAN	h64e11.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
3726	16768	28680	1.28	8.0E-74	BE048846.1	EST_HUMAN	h64e11.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
5065	18075	30855	4.18	8.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S.cerevisiae CHL1-like helicase) (DDX11) mRNA
5065	18075	30856	4.18	8.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S.cerevisiae CHL1-like helicase) (DDX11) mRNA
5439	18541	31451	3.08	8.0E-74	11056013	NT	Homo sapiens actin filament associated protein (AFAP), mRNA
806	13961	28917	2.09	5.0E-74	AW020986.1	EST_HUMAN	df17c09.y1 Morion Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483704 5'
2713	15707		3.68	8.0E-74	AW362768.1	EST_HUMAN	PMO-CT0289-271039-001-h07 CT0289 Homo sapiens cDNA
5461	18581	31482	1.78	8.0E-74	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
5887	18976	32168	12.05	5.0E-74	X89670.1	NT	H. sapiens mRNA for TPOR16 protein
5938	19024	32218	7.23	8.0E-74	4507886	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (s34d) (VAPA) mRNA, and translated products
6013	19066	32298	2.71	8.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
6013	19066	32297	2.71	8.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
7080	20101	33412	2.18	8.0E-74	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7832	20101	33412	0.54	8.0E-74	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
8371	21340	34751	3.05	8.0E-74	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
11087	24048	37670	4.06	8.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11087	24048	37571	4.08	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
279	13374	26303	1.85	4.0E-74	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
853	13909	26867	5.8	4.0E-74	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
1979	15000	28002	2.21	4.0E-74	AB028998.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1979	15000	28003	2.21	4.0E-74	AB028998.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2086	15103	28120	2.38	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2086	15103	28121	2.38	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2142	15159	28175	1.51	4.0E-74	AB032984.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2434	15441	28459	0.91	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene
3107	16164	28078	6.46	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene
4091	17125	30018	1.23	4.0E-74	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4587	17609	30504	2.06	4.0E-74	7662183	NT	Homo sapiens KIAA0669 gene product (KIAA0669), mRNA
4646	17667	30554	0.89	4.0E-74	Z1727.1	NT	Homo sapiens mRNA for transmembrane receptor protein
6055	18067	30946	0.74	4.0E-74	AB040609.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
6895	21881		21.61	3.0E-74	AA300378.1	EST_HUMAN	EST113131 Thymus tumor III Homo sapiens cDNA 5' end similar to similar to ribosomal protein L37
9727	22755	36208	2.57	3.0E-74	M78984.1	EST_HUMAN	EST01132 Subtracted hippocampus, Striatum (cat. #36205) Homo sapiens cDNA clone HHCFP81
10703	23625	37122	2.68	3.0E-74	AA601493.1	EST_HUMAN	nc17g06.e1 NC1 CGAP Phae1 Homo sapiens cDNA clone IMAGE:1100884 3'
959	14012	26965	58.94	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
959	14012	26966	58.94	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
1179	14220	27176	0.9	2.0E-74	AF020092.1	NT	Human endogenous retrovirus HERV-K-147D
1249	14285	27251	1.32	2.0E-74	AB50528.1	EST_HUMAN	wc51e07.x1 NC1 CGAP Lu28 Homo sapiens cDNA clone IMAGE:2647204 3' similar to SW:GG95_HUMAN
1599	14631	27606	3.54	2.0E-74	4885198	NT	Q08378 GOLGIN-65; contains element MER22 repetitive element;
1599	14631	27607	3.54	2.0E-74	4885198	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
2609	15608	28632	3.02	2.0E-74	AI557280.1	EST_HUMAN	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
5042	18055	30933	3.67	2.0E-74	AL355092.1	NT	PT2.1_15_G11.7 tumor2 Homo sapiens cDNA 3'
5042	18055	30934	3.67	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
5046	18059	30838	0.93	2.0E-74	J02963.1	NT	Novel human gene mapping to chromosome 22
5996	25847	32174	2.03	2.0E-74	BE711134.1	EST_HUMAN	Human platelet glycoprotein IIb mRNA, 3' end
							RC8-HT0678-220500-011-003 HT0678 Homo sapiens cDNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5969	25650	32280	1.93	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5969	25650	32281	1.93	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
6077	25650	32280	2.58	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
6077	25650	32281	2.58	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7310	20281	33621	1.14	2.0E-74	BF030788.1	EST_HUMAN	601557624F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827648 5'
8272	21241	34652	1.35	2.0E-74	AB037818.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
9737	22765	36220	8.08	2.0E-74	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
12058	24031	38528	1.72	2.0E-74	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
12521	25252		3.11	2.0E-74	AA198181.1	EST_HUMAN	z96608.s1 Stragatene muscle 937209 Homo sapiens cDNA clone IMAGE:628018 3'
55	13175	26086	2.22	1.0E-74	7657334	NT	Homo sapiens MisschepanNIK-related kinase (MINK), mRNA
337	13426	26348	3.95	1.0E-74	AW816405.1	EST_HUMAN	QV4-ST0234-181189-037-05 ST0234 Homo sapiens cDNA
500	13572	26494	1.1	1.0E-74	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
507	13578	26499	8.18	1.0E-74	X02344.1	NT	Homo sapiens beta 2 gene
603	13670	26594	2.15	1.0E-74	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
1001	14052	27004	2.21	1.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2235	15249	28273	3.58	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
3156	16212	29127	2.83	1.0E-74	4758697	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA
3943	16883	29898	0.79	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3943	16883	29899	0.79	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3992	17032	29941	5.75	1.0E-74	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4092	17126	30019	0.86	1.0E-74	BE089080.1	EST_HUMAN	RC2-BT0642-270300-019-003 BT0642 Homo sapiens cDNA
4286	17325	30205	0.71	1.0E-74	BE467769.1	EST_HUMAN	h273N08.x1 NC1_CGAP_L124 Homo sapiens cDNA clone IMAGE:3213663 3' similar to WP:B0511.12
6217	18226	31100	1.36	1.0E-74	D83327.1	NT	CE:17351 ;
6863	19816	33210	0.97	1.0E-74	M89914.1	NT	Homo sapiens DCRR1 mRNA, partial cds
7888	20832	34211	1.17	1.0E-74	11417977	NT	Homo sapiens DCRR1 mRNA, partial cds
8391	21360	34767	1.1	1.0E-74	BE549105.1	EST_HUMAN	Human neurofibromin (NF1) gene, complete cds
8391	21360	34768	1.1	1.0E-74	BE549105.1	EST_HUMAN	Homo sapiens KIAA0852 protein (KIAA0852), mRNA
9157	22123	35552	3.86	1.0E-74	AF214982.1	NT	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
9186	22152	35581	0.71	1.0E-74	BF351951.1	EST_HUMAN	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
10600	23522	37015	0.55	1.0E-74	AJ261650.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
10600	23522	37016	0.55	1.0E-74	AJ261650.1	NT	MRO-HT0559-230500-021-a03 HT0559 Homo sapiens cDNA
10847	23767	37268	1.51	1.0E-74	11420549	NT	Homo sapiens partial AK155 gene for AK155 protein, exons 1-3 and joined CDS
12100	24971	39568	1.5	1.0E-74	AB007941.1	NT	Homo sapiens partial AK155 gene for AK155 protein, exons 1-3 and joined CDS
							Homo sapiens hypothetical protein FLJ10783 (FLJ10783), mRNA
							Homo sapiens mRNA for KIAA0472 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12154	25012	36818	3.9	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12235	25087		7.14	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12848	25458		1.52	1.0E-74	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2852	15649		6.34	8.0E-75	AF176228.1	NT	Homo sapiens DNA cytosine-5 methyltransferase 3B (DNMT3B) mRNA, complete cds
12543	25288		1.81	8.0E-75	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2329	16340	28382	1.16	6.0E-75	AB17415.1	EST_HUMAN	W38a08.x1 NCI CGAP P722 Homo sapiens cDNA clone IMAGE:2417654 3' similar to gb:M14123_cds4
5201	18210	31084	0.91	5.0E-75	BE841305.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
8075	21012	34411	0.51	5.0E-75	AA573448.1	EST_HUMAN	MRO-SN0040-080600-008-g06 SNO040 Homo sapiens cDNA
8075	21012	34412	0.51	5.0E-75	AA573448.1	EST_HUMAN	h89d03.s1 NCI CGAP C63 Homo sapiens cDNA clone IMAGE:1028933 3'
9259	22225	35654	1.13	5.0E-75	BE272325.1	EST_HUMAN	h89d03.s1 NCI CGAP C63 Homo sapiens cDNA clone IMAGE:1028933 3'
9472	22436	35874	0.64	5.0E-75	AA132811.1	EST_HUMAN	601126088F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:2889885 5'
9549	22512	35961	0.89	5.0E-75	BE561655.1	EST_HUMAN	2017608.L1 Stratiene colon (#637204) Homo sapiens cDNA clone IMAGE:567174 5'
9549	22512	35982	0.89	5.0E-75	BE561655.1	EST_HUMAN	601346908F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3687458 5'
9728	22756	36209	1.42	5.0E-75	BF690254.1	EST_HUMAN	601346908F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3687458 5'
10594	23516	37007	2.9	5.0E-75	AB38823.1	EST_HUMAN	602186616T1 NIH_MGC 49 Homo sapiens cDNA clone IMAGE:4288738 3'
112	13223	26147	1.88	4.0E-75	BE081333.1	EST_HUMAN	h31c12.x1 NCI CGAP C08 Homo sapiens cDNA clone IMAGE:2242390 3' similar to TR:P97361 P97361
459	13532		2.68	4.0E-75	N36757.1	EST_HUMAN	HYPOTHETICAL 20.1 KD PROTEIN;
1780	14809	27795	1.73	4.0E-75	AW897230.1	EST_HUMAN	QV1-BT0632-210200-079-e02 BT0632 Homo sapiens cDNA
2861	15921	28941	4.5	4.0E-75	BE408484.1	EST_HUMAN	Yx80h08.L1 Soares melanocyte 2NBrHM Homo sapiens cDNA clone IMAGE:269055 5'
3512	16658	28482	0.93	4.0E-75	8922837	NT	C80-NN0057-150400-335-a11 NN0057 Homo sapiens cDNA
6507	18703	31859	0.65	4.0E-75	11417846	NT	601303688F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3638344 5'
6507	18703	31860	0.65	4.0E-75	11417846	NT	Homo sapiens hypothetical protein FLJ10747 (FLJ10747), mRNA
6400	19468	32715	6.35	4.0E-75	6579457	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
6823	18973	33270	1.51	4.0E-75	11417846	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
6823	18973	33271	1.51	4.0E-75	11417846	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
11044	24008	37634	15.05	4.0E-75	7698505	NT	Homo sapiens myoest, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
1004	14055	27007	4.38	3.0E-75	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1005	14055	27007	3.22	3.0E-75	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1853	14879	27875	2.36	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
2430	15437	28454	5.12	3.0E-75	4759153	NT	Homo sapiens synaptonemal-associated protein, 29kD (SNAP29) mRNA
3034	16092	29010	1.06	3.0E-75	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3203	18258	28177	1.13	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3361	16411	28324	0.95	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
3361	16411	28335	0.95	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
3752	16794	29705	0.78	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4197	17228	30118	1.03	3.0E-75	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4468	17492	30379	0.71	3.0E-75	7682421	NT	Homo sapiens KIAA0871 protein (KIAA0871), mRNA
5323	18429	31179	1.15	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
5323	18429	31180	1.15	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
6657	18714	32891	0.51	3.0E-75	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6657	18714	32892	0.51	3.0E-75	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6835	20159	33479	1.78	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
6835	20159	33480	1.78	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
7342	20313	33658	4.47	3.0E-75	7682209	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
7342	20313	33657	4.47	3.0E-75	7682209	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
7884	20828	34204	2.82	3.0E-75	4886632	NT	Homo sapiens Oricogene TIM (TIM) mRNA
7884	20828	34205	2.82	3.0E-75	4886632	NT	Homo sapiens Oricogene TIM (TIM) mRNA
8338	22301	35730	1.21	3.0E-75	4886632	NT	Homo sapiens Oricogene TIM (TIM) mRNA
10037	22964	36431	0.85	3.0E-75	11420804	NT	Homo sapiens small 1 (drosophila homolog), zinc finger protein (SNAI1), mRNA
10908	23828	37341	4.16	3.0E-75	11420222	NT	Homo sapiens Drosophila Kelch like protein (DKELCHL), mRNA
12085	24657	38552	1.73	3.0E-75	6715588	NT	Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), mRNA
12085	24657	38553	1.73	3.0E-75	6715588	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
5768	18880		1.41	2.0E-75	AV734680.1	EST_HUMAN	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
9103	22069	35495	2.56	2.0E-75	A311783.1	EST_HUMAN	AV734680 cDNA Homo sapiens cDNA clone IMAGE:1915898 3' similar to TRC-Q86388 Q86388 POL/ENV GENE;
2311	15323	28346	7.79	1.0E-75	AW168135.1	EST_HUMAN	q91e02.x1 NC1 CGAP U14 Homo sapiens cDNA clone IMAGE:2632707 3' similar to contains PTR7.1
2857	16015	28943	3.95	1.0E-75	X52221.1	NT	xg60d02.x1 NC1 CGAP U14 Homo sapiens cDNA clone IMAGE:2632707 3' similar to contains PTR7.1
4718	17738	30630	0.65	1.0E-75	BE278301.1	EST_HUMAN	PT77 repetitive element;
6224	18232	31107	0.7	1.0E-75	BE894192.1	EST_HUMAN	H. sapiens EROX2 gene, exons 1 & 2 (partial)
7843	20790	34165	0.76	1.0E-75	BE082528.1	EST_HUMAN	601157633F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504272 5'
7843	20790	34166	0.76	1.0E-75	BE082528.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
							RC5-BT0640-023300-031-H03 BT0640 Homo sapiens cDNA
							RC5-BT0640-023300-031-H03 BT0640 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8767	21724		12.42	1.0E-75	AA389270.1	EST_HUMAN	z557h03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728485 3' similar to gbM13932 40S
9783	22724	36178	4.03	1.0E-75	BF313845.1	EST_HUMAN	RIBOSOMAL PROTEIN S17 (HUMAN);
9783	22724	36180	4.03	1.0E-75	BF313845.1	EST_HUMAN	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
11229	24182		3.78	1.0E-75	AA694377.1	EST_HUMAN	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
11428	24372	37910	2.13	1.0E-75	AF223391.1	NT	ac77b08.s1 Stratiene lung (#837210) Homo sapiens cDNA clone IMAGE:868599 3'
12438	18232	31107	1.72	1.0E-75	BE894182.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
46	13188	26070	2.23	9.0E-78	A1652848.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
48	13188	26071	2.23	9.0E-78	A1652848.1	EST_HUMAN	w630b10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O76235 O76235
2425	15432		0.88	9.0E-78	AA702415.1	EST_HUMAN	TRAP1;
10261	23186	36570	37.43	9.0E-78	M12837.1	NT	w650b10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O76235 O76235
937	13980	28941	0.98	8.0E-78	4504374	NT	TRAP1;
937	13980	28942	0.98	8.0E-78	4504374	NT	Z85507.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:447541 3'
2821	15979	28904	1.28	8.0E-78	7706724	NT	Human ferritin Heavy subunit mRNA, complete cds
6296	16397	32808	4.79	8.0E-78	11421442	NT	Homo sapiens H factor 1 (complement) (HIF1) mRNA
7731	20888	34049	1.41	8.0E-78	11436215	NT	Homo sapiens H factor 1 (complement) (HIF1) mRNA
7818	20785	34141	0.97	8.0E-78	11418212	NT	Homo sapiens mediator (Sur2), mRNA
8639	21607	35030	0.64	8.0E-78	11416981	NT	Homo sapiens LIM domain kinase 1 (LIMK1), mRNA
9453	22417	35955	0.46	8.0E-78	AB046784.1	NT	Homo sapiens serine/threonine kinase 2 (STK2), mRNA
10744	23686	37161	1.41	8.0E-78	M13782.1	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
11028	23901	37518	4.08	8.0E-78	10442821	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
12767	25408		2.28	8.0E-78	11417882	NT	Homo sapiens mRNA for KIAA1544 protein, partial cds
777	13836	28782	1.41	7.0E-78	5016062	NT	Human adenosine deaminase (ADA) gene, complete cds
3305	16398	28277	28.65	7.0E-78	AF058490.1	NT	Homo sapiens baculoviral IAP repeat-containing 6 (BIRC6), mRNA
3311	16394	28284	8.23	7.0E-78	4505032	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
4399	17427	30311	4.52	7.0E-78	4507184	NT	Homo sapiens dihydropyrimidine dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD) mRNA
4399	17427	30312	4.52	7.0E-78	4507184	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
1238	14274		12.96	6.0E-78	BE386283.1	EST_HUMAN	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
11793	23948	37469	2.36	6.0E-78	BE273201.1	EST_HUMAN	Homo sapiens septaplatin reductase (7,8-dihydropteridin:NADP+ oxidoreductase) (SPR) mRNA
							Homo sapiens septaplatin reductase (7,8-dihydropteridin:NADP+ oxidoreductase) (SPR) mRNA
							601132018F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:368767 5'
							601142253F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3508029 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1680	14982	27983	8.97	5.0E-78	D63874.1	NT	Human mRNA for HMG-1, complete cds
1680	14982	27984	8.97	5.0E-78	D63874.1	NT	Human mRNA for HMG-1, complete cds
1960	14982	27985	8.97	5.0E-78	D63874.1	NT	Human mRNA for HMG-1, complete cds
3220	16275	29199	1.01	4.0E-78	BE814086.1	EST_HUMAN	QV3-BN0047-270700-283-g08 BN0047 Homo sapiens cDNA
5342	18447	31200	1.08	4.0E-78	BE783412.1	EST_HUMAN	601471725F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874470 5'
10384	23306	36763	6.89	4.0E-78	D81825.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujwara) Homo sapiens cDNA clone GEN-178G01 5'
10384	23306	36764	6.89	4.0E-78	D81825.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujwara) Homo sapiens cDNA clone GEN-178G01 5'
630	13695	26814	1.94	3.0E-78	BF516282.1	EST_HUMAN	UIH-BW1-anz-b-04-U1.st NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
630	13695	26815	1.94	3.0E-78	BF516282.1	EST_HUMAN	UIH-BW1-anz-b-04-U1.st NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
1603	14635	27611	9.36	3.0E-78	4503478	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
1603	14635	27612	9.36	3.0E-78	4503478	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
3442	16489	29407	5.03	3.0E-78	BF375889.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
3442	16489	29408	5.03	3.0E-78	BF375889.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
4105	17139	30034	14.72	3.0E-78	BE348693.1	EST_HUMAN	h87f12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151823 3' similar to TR:O94889 O94889 KIAA0792 PROTEIN.;
5301	18304	31165	0.88	3.0E-78	AV702881.1	EST_HUMAN	AV702881 ADB Homo sapiens cDNA clone ADBSC02 5'
6309	18327	38812	2.12	3.0E-78	Z41314.1	EST_HUMAN	HSCZQD042 normalized infant brain cDNA Homo sapiens cDNA clone c-azd04 3'
5822	18912	32095	1	3.0E-78	AA180611.1	EST_HUMAN	z073c07.t1 Stratiogene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592824 5' similar to gbl-32978 MIXED LINEAGE KINASE 1 (HUMAN);
6102	19181	32400	0.71	3.0E-78	AW027705.1	EST_HUMAN	ww76c05.x1 Soares thymus_NHFT Homo sapiens cDNA clone IMAGE:2636368 3'
6504	19598	32820	8.03	3.0E-78	AF286698.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
8490	21458	34876	0.83	3.0E-78	N42671.1	EST_HUMAN	y20g10.t1 Soares melanocyte 2N15HM Homo sapiens cDNA clone IMAGE:271842 5'
10074	23001	36471	3.32	3.0E-78	AW288953.1	EST_HUMAN	xs49h01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2773009 3'
10098	23024	36498	1.08	3.0E-78	AA442309.1	EST_HUMAN	z64d11.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757461 5'
10098	23024	36500	1.08	3.0E-78	AA442309.1	EST_HUMAN	z64d11.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757461 5'
12143	25760	31519	2.43	3.0E-78	AW967984.1	EST_HUMAN	EST380059 MAGE resequences, MAGE Homo sapiens cDNA
12248	25971	31901	4.4	3.0E-78	AW658455.1	EST_HUMAN	EST388525 MAGE resequences, MAGE Homo sapiens cDNA
281	13376	26305	1.46	2.0E-78	D64295.1	NT	Human mRNA for possible protein TPRDII, complete cds
342	13431	26352	2.6	2.0E-78	D64295.1	NT	Human mRNA for possible protein TPRDII, complete cds
342	13431	26353	2.6	2.0E-78	D64295.1	NT	Human mRNA for possible protein TPRDII, complete cds
491	13534		1.14	2.0E-78	4557882	NT	Homo sapiens immunoglobulin (CD78A) binding protein 1 (IGBP1) mRNA
592	13659	26573	1.12	2.0E-78	4503944	NT	Homo sapiens glucagon (GCG) mRNA
1032	14078	27031	1.37	2.0E-78	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
1537	14570	27542	1.74	2.0E-78	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA

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1537	14570	27643	1.74	2.0E-78	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1945	14969	27967	1.03	2.0E-78	AA263984.1	EST_HUMAN	z603h11.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:701825 3'
2854	15914	28837	3.73	2.0E-78	P23288	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F5
3308	16391	29281	1.87	2.0E-78	AA445982.1	EST_HUMAN	z64e02.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:780886 3' similar to SW:TB6_HUMAN P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR.
3308	16391	29282	1.87	2.0E-78	AA445982.1	EST_HUMAN	z64e02.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:780886 3' similar to SW:TB6_HUMAN
4561	17584	30478	1.01	2.0E-78	AL163283.2	NT	P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR.
4884	17899	30888	7.6	2.0E-78	AW1879818.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C083
5382	18486		0.97	2.0E-78	AF127845.1	NT	QV3-OT0028-Z20300-132-b11 OT0028 Homo sapiens cDNA
5700	18795	31889	5.35	2.0E-78	AB028004.1	NT	Gorilla gorilla olfactory receptor (GGO18) gene, partial cds
7643	20603	33988	0.55	2.0E-78	11421326	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7688	20627	33991	0.76	2.0E-78	11426908	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
7824	20667	34293	1.06	2.0E-78	11427410	NT	Homo sapiens A kinase (PRKA) anchor protein 10 (AKAP10), mRNA
10945	23567	37064	7.03	2.0E-78	11437211	NT	Homo sapiens TPCR88 protein (HSTPCR88P), mRNA
11268	24218	37742	2.64	2.0E-78	7549807	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC68150), mRNA
4326	17355	30241	3.37	1.0E-78	D63874.1	NT	Homo sapiens HIRA interacting protein 4 (dhaJ-like) (HIRIP4), mRNA
4326	17355	30242	3.37	1.0E-78	D63874.1	NT	Human mRNA for HMG-1, complete cds
5523	18822	31567	5.74	1.0E-78	BE796637.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
6372	19440		0.64	1.0E-78	AA333207.1	EST_HUMAN	601689898F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
7109	20043	33345	4.09	9.0E-77	BE889525.1	EST_HUMAN	EST37301 Embryo, 8 week Homo sapiens cDNA 5' end
12823	25499		1.36	9.0E-77	BE410384.1	EST_HUMAN	601512439F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913737 5'
189	13289	28215	1.35	8.0E-77	R83144.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636753 5'
4550	17573	30463	1.26	8.0E-77	BF205181.1	EST_HUMAN	yp11M02.r1 Soares breast 3Nt-Hat Homo sapiens cDNA clone IMAGE:187166 5' similar to SP-ANKB_HUMAN Q01484 ANKYRIN, BRAIN VARIANT 1;
5528	18827	31563	1.83	8.0E-77	4506230	NT	601866828F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4108503 5'
11716	24679	38257	1.82	8.0E-77	AA019770.1	EST_HUMAN	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (MavG4 homology) (PSMD7) mRNA
11716	24679	38258	1.82	8.0E-77	AA019770.1	EST_HUMAN	z62e02.r1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:363578 5'
12800	25494	31732	4.86	8.0E-77	R00245.1	EST_HUMAN	z62e02.r1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:363578 5'
1948	14970	27988	2.43	7.0E-77	AA625755.1	EST_HUMAN	ye69104.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:123007 3' similar to cortals
2421	15428	28451	1.88	7.0E-77	4505944	NT	ye69104.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
2421	15428	28452	1.88	7.0E-77	4505944	NT	z191g01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
							Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
							Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
262	13358	26283	4.64	6.0E-77	4504600	NT	Homo sapiens Interferon (alpha, beta and omega) receptor 2 (IFNAR2) mRNA
1144	14187	27138	20.18	6.0E-77	AW957753.1	EST_HUMAN	EST368823 MAGE resequences, MAGE Homo sapiens cDNA
1545	14578	27551	3.97	6.0E-77	AI204068.1	EST_HUMAN	q77h12.x1 Soares_fetal_lung_NbtL19W Homo sapiens cDNA clone IMAGE:1745063 3'
1240	14276	27236	2.34	5.0E-77	AF041015.1	NT	7 Homo sapiens glucokinase (GCK) gene, exon 2
1382	14386	27387	1.41	5.0E-77	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2635	15691	28709	1.03	5.0E-77	AF162866.1	NT	Homo sapiens tousel-like kinase 1 (TLK1) mRNA, complete cds
2774	15768	28786	0.96	5.0E-77	4503160	NT	Homo sapiens cullin 1 (CUL1) mRNA
3534	16580	29504	0.84	5.0E-77	8394518	NT	Homo sapiens ubiquitin specific protease 18 (USP18), mRNA
4732	17762	30644	0.82	5.0E-77	5031680	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4732	17762	30645	0.82	5.0E-77	5031680	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4975	17990	30880	3.64	5.0E-77	AL043853.1	EST_HUMAN	DKFZp434G1728_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G1728 5'
6951	20175	33489	0.84	5.0E-77	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7548	20511	33869	0.52	5.0E-77	X98298.1	NT	H. sapiens mRNA for ubiquitin hydrolase
7849	20511	33869	0.87	5.0E-77	X98298.1	NT	H. sapiens mRNA for ubiquitin hydrolase
8711	21679	36104	1.22	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
8711	21679	35105	1.22	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
8928	22811	36284	3	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
8928	22811	36285	3	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
10857	23777	37276	0.82	5.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
10857	23777	37277	0.82	5.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
1989	15010	28015	1.26	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
1989	15010	28016	1.26	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10682	23574	37069	0.71	3.0E-77	H65167.1	EST_HUMAN	yu64g01.r1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP-S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10682	23574	37070	0.71	3.0E-77	H65167.1	EST_HUMAN	yu64g01.r1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP-S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10688	23888	37369	0.68	3.0E-77	AD17333.1	EST_HUMAN	alpha31h07.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1638973 3'
10688	23888	37400	0.68	3.0E-77	AD17333.1	EST_HUMAN	alpha31h07.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1638973 3'
11222	24175	37701	3.68	3.0E-77	BF358917.1	EST_HUMAN	PM3-MT0078-080800-005-g03 MT0078 Homo sapiens cDNA
1354	14389	27358	1.68	2.0E-77	AV764617.1	EST_HUMAN	AV764617 MDS Homo sapiens cDNA clone MDSBT10 5'
1428	14462	27439	2.31	2.0E-77	AW697712.1	EST_HUMAN	RC3-BN0053-170200-011-h01 BN0053 Homo sapiens cDNA
2102	15119	28140	1.01	2.0E-77	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
2113	15130	28160	2.46	2.0E-77	7706315	NT	Homo sapiens G31-79 protein (LOC51634), mRNA
2600	16898	28620	2.28	2.0E-77	AB037838.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2800	15998	28621	2.28	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
4084	17100	28692	1.25	2.0E-77	BE044318.1	EST_HUMAN	h043005.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW:GAG2_HUMAN P10284 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4442	17468	30357	0.68	2.0E-77	AB13519.1	EST_HUMAN	hw22g02.x1 NCJ_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
4442	17468	30358	0.68	2.0E-77	AB13519.1	EST_HUMAN	hw22g02.x1 NCJ_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
4802	17919	30713	2.32	2.0E-77	AA653025.1	EST_HUMAN	ns68g12.s1 NCJ_CGAP_P2 Homo sapiens cDNA clone IMAGE:1188838 similar to SW:FL29_HUMAN P47014 60S RIBOSOMAL PROTEIN L28. [1]; contains element MSR1 repetitive element ;
5158	17468	30357	0.65	2.0E-77	AB13519.1	EST_HUMAN	hw22g02.x1 NCJ_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
5158	17468	30358	0.65	2.0E-77	AB13519.1	EST_HUMAN	hw22g02.x1 NCJ_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
6065	19148	32358	2.06	2.0E-77	BE288940.1	EST_HUMAN	601118852F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028436 5'
6296	19368	32607	1.62	2.0E-77	BE787143.1	EST_HUMAN	601476802F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879505 5'
7380	20350	33701	14.21	2.0E-77	AB833003.1	EST_HUMAN	at74a09.x1 Barleed colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377720 3' similar to TR:Q13311
8874	21841	35284	0.75	2.0E-77	A382707.1	EST_HUMAN	q13311 TAX1-BINDING PROTEIN TXBP161. [1];
8886	22639	36295	5.64	2.0E-77	U50321.1	NT	q170c09.x1 NCJ_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2017380 3' similar to WP:F28D11.1
8886	22639	36298	5.64	2.0E-77	U50321.1	NT	CE05765 LOW DENSITY LIPID RECEPTOR-RELATED PROTEIN ;
10354	23278	36763	0.5	2.0E-77	BF310348.1	EST_HUMAN	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
10354	23278	36754	0.5	2.0E-77	BF310348.1	EST_HUMAN	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
45	13165	28068	0.94	1.0E-77	AB033102.1	NT	601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
45	13165	28069	0.94	1.0E-77	AB033102.1	NT	601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
272	13368	28294	1.33	1.0E-77	4502166	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
272	13368	28285	1.33	1.0E-77	4502166	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
876	15953	28891	2.31	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
876	15953	28892	2.31	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2450	15455	28477	1.73	1.0E-77	AB028024.1	NT	Homo sapiens mRNA for KIAA1101 protein, complete cds
3058	16115	29028	2.01	1.0E-77	4503900	NT	Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DECR1), mRNA
4380	17408	30289	3.92	1.0E-77	7708289	NT	Homo sapiens CG3-80 protein (LOC51626), mRNA
4525	17550	30438	0.73	1.0E-77	4738053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
4552	17575	30486	16.98	1.0E-77	AJ228041.1	NT	Homo sapiens 659 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4680	17701	30589	2.11	1.0E-77	6552322	NT	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA
4721	17741	30632	0.72	1.0E-77	AI273014.1	EST_HUMAN	g03g04.x1 NC1 CGAP_K68 Homo sapiens cDNA clone IMAGE:1681110 3'
5000	17550	30438	0.95	1.0E-77	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
5219	17550	30438	0.88	1.0E-77	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
5246	18254		1.12	1.0E-77	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
6038	19120	32324	1.81	1.0E-77	AF086844.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6038	19120	32325	1.81	1.0E-77	AF086844.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6165	19240	32471	1.39	1.0E-77	IM25844.1	NT	Human von Willebrand factor gene, exon 20
6590	19650	32921	1.28	1.0E-77	4885182	NT	Homo sapiens diaphanous (Drosophila, homolog) 1 (DIAPH1), mRNA
7254	19889	33286	14.51	1.0E-77	5881412	NT	Homo sapiens elastin (supravalvular aortic stenosis, Williams-Beuren syndrome) (ELN), mRNA
7928	20871	34280	0.91	1.0E-77	11420159	NT	Homo sapiens cullin 1 (CUL1), mRNA
8040	20973	34373	0.69	1.0E-77	X04571.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
8620	22584	36013	0.65	1.0E-77	X04354.1	NT	H. sapiens DNA for Corne cGMP-PDE gene
9620	22584	36014	0.65	1.0E-77	X04354.1	NT	H. sapiens DNA for Corne cGMP-PDE gene
10890	23810	37316	0.92	1.0E-77	AB028396.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10890	23810	37317	0.92	1.0E-77	AB028396.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10916	23836	37352	3	9.0E-78	AW755302.1	EST_HUMAN	RC3-CT0254-280889-011-505 CT0254 Homo sapiens cDNA
6599	19849	32919	2.93	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-c05 ET0023 Homo sapiens cDNA
6599	19849	32920	2.93	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-c05 ET0023 Homo sapiens cDNA
86	13202	26126	2.14	8.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
86	13202	26127	2.14	8.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
3325	16378	29297	8.58	6.0E-78	BF944101.1	EST_HUMAN	602016826F1 NCL_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4152511 5'
6712	19768		2.34	6.0E-78	11432710	NT	Homo sapiens GDNF family receptor alpha 1 (GFRA1), mRNA
219	13319	26244	1.79	5.0E-78	11422486	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
2569	15570	28590	5.46	5.0E-78	AW673424.1	EST_HUMAN	be54h03.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800405 5' similar to WP.Y4888A.6
3398	16445	29372	3.94	5.0E-78	M55586.1	NT	CE22121 ; Human collagenase type IV (CLG4) gene, exon 6
5486	18586	31497	2.45	5.0E-78	AF038536.1	NT	Homo sapiens Best's muscular dystrophy related protein mRNA, partial cds
5655	18751	31917	24.78	5.0E-78	11416595	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7361	20331	33681	2.22	5.0E-78	AW953120.1	EST_HUMAN	EST1365190 IMAGE resequencing, MAGB Homo sapiens cDNA
9438	22402	35940	6.86	5.0E-78	U60989.1	NT	Human lysosomal alpha-mannosidase (manB) gene, exon 7
9439	22403	35941	3.51	5.0E-78	BE960836.1	EST_HUMAN	801849081F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:3031887 5'
11614	24552	38112	1.84	5.0E-78	BE241639.1	EST_HUMAN	TCAAAP1E0686 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAAP0686
11614	24552	38113	1.64	5.0E-78	BE241639.1	EST_HUMAN	TCAAAP1E0686 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAAP0686
1139	14182	27133	1.86	4.0E-78	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhs3) Homo sapiens cDNA clone DKFZp434N0323 5'
1521	14553	27524	2.74	4.0E-78	AL355841.1	NT	Novel human gene mapping to chromosome 22
1658	14888	27883	1.11	4.0E-78	A925094.1	EST_HUMAN	w97b12x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2495615 3' similar to SW:WAP_PIG
2326	15337	28360	3.31	4.0E-78	AF107405.1	NT	O40655 WHEY ACIDIC PROTEIN PRECURSOR ;
4350	17377	30266	1.47	4.0E-78	7858878	NT	Homo sapiens pre-mRNA splicing factor (SFRS3) mRNA, complete cds
4807	17824	30719	2.16	4.0E-78	4505808	NT	Homo sapiens synovial (LOC30816), mRNA
4807	17824	30720	2.18	4.0E-78	4505808	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
5862	18951	32137	1.13	4.0E-78	11420732	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
6297	19359	32808	0.61	4.0E-78	7882109	NT	Homo sapiens SFRS protein kinase 2 (SRPK2), mRNA
6297	19359	32809	0.61	4.0E-78	7882109	NT	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
6725	19781	33060	0.59	4.0E-78	4506736	NT	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
7733	20688	34052	0.58	4.0E-78	4506736	NT	Homo sapiens ribosomal protein S8 kinase, 70kD, polypeptide 1 (RPS8KB1) mRNA
9205	22171	35601	1.66	4.0E-78	AF012872.1	NT	Homo sapiens ribosomal protein S8 kinase, 70kD, polypeptide 1 (RPS8KB1) mRNA
9205	22171	35602	1.66	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
6723	22761	36204	0.64	4.0E-78	11417251	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
10811	23732	37233	1.97	4.0E-78	11560151	NT	Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), mRNA
10811	23732	37234	1.97	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
11749	24634	38213	1.55	4.0E-78	AF168148.1	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
11953	24764	38360	5.69	4.0E-78	X05844.1	NT	Homo sapiens s-CaBP1 (CABP1) mRNA, complete cds
12126	24995	38599	2.38	4.0E-78	11024711	NT	Human transforming growth factor-beta precursor gene exons 4-5 (and joined mature peptide)
12797	25428	31739	3.89	4.0E-78	AB011398.1	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
162	13265	26189	2.77	3.0E-78	AF095901.1	NT	Homo sapiens gene for AF-6, complete cds
162	13265	26180	2.77	3.0E-78	AF095901.1	NT	Homo sapiens eRF1 gene, complete cds
3776	16818		0.94	3.0E-78	AU140804.1	EST_HUMAN	Homo sapiens eRF1 gene, complete cds
3829	16889	29771	0.68	3.0E-78	4507334	NT	AU140804 PLAGE3 Homo sapiens cDNA clone PLACE300373 5'
							Homo sapiens synaptotagmin 1 (SYNJ1), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4131	18669	28771	0.79	3.0E-78	4507934	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
10849	23571		5.79	3.0E-78	BE144758.1	EST_HUMAN	CM0-HT0180-041089-065-c07 HT0180 Homo sapiens cDNA
11328	24278	37804	1.8	3.0E-78	BE166318.1	EST_HUMAN	QV0-HT0387-150200-114-g08 HT0387 Homo sapiens cDNA
3138	18185		4.1	2.0E-78	U04489.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 20
4042	17080		1.43	2.0E-78	AA311872.1	EST_HUMAN	EST182583 Jurkat T-cells VI Homo sapiens cDNA 5' end
7705	20682	34027	1.24	2.0E-78	AW402308.1	EST_HUMAN	U1-HF-BK0-eaf-g-10-0-U1.H_MGC_38 Homo sapiens cDNA clone IMAGE:3054139 5'
7705	20682	34028	1.24	2.0E-78	AW402308.1	EST_HUMAN	U1-HF-BK0-eaf-g-10-0-U1.H_MGC_38 Homo sapiens cDNA clone IMAGE:3054139 5'
8003	20942	34335	3.2	2.0E-78	BF689800.1	EST_HUMAN	602186528F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4298589 5'
8376	21344	34765	2.54	2.0E-78	AV714177.1	EST_HUMAN	AV714177 DCB Homo sapiens cDNA clone DCBFW09 5'
8795	21782	35183	1.51	2.0E-78	AI557509.1	EST_HUMAN	P12.1_16_B07.r.tumor2 Homo sapiens cDNA 3'
8795	21782	35184	1.51	2.0E-78	AI557509.1	EST_HUMAN	P12.1_16_B07.r.tumor2 Homo sapiens cDNA 3'
11416	24380	37895	2.5	2.0E-78	AI197837.1	EST_HUMAN	q50H05.x1 NCI_CGAP_Bim26 Homo sapiens cDNA clone IMAGE:1859961 3' similar to WP.R60.1
11468	24401	37949	2.03	2.0E-78	N68951.1	EST_HUMAN	CE08325 PROTEIN KINASE;
5378	18482	31357	3.22	1.0E-78	11417304	NT	2a48f12 st Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:285823 3'
7144	18378	31284	0.87	1.0E-78	AV849899.1	EST_HUMAN	Homo sapiens GAP-like protein (LOC51908), mRNA
8499	21467		2.95	1.0E-78	U52373.1	NT	AV849899 GLC Homo sapiens cDNA clone GLOBMCD1 3'
12323	26125	31847	1.81	1.0E-78	11430480	NT	Human serine/threonine kinase MNB (mnb) mRNA, complete cds
4727	17747	30638	3.81	9.0E-79	11626991	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
4899	17916	30807	3.55	9.0E-79	BE000837.1	EST_HUMAN	Homo sapiens peptide YY (PYY), mRNA
5507	18607	31537	16.13	9.0E-79	AB028070.1	NT	RC2-BN0074-060300-014-c12 BN0074 Homo sapiens cDNA
6474	19539	32785	2.49	9.0E-78	5454145	NT	Homo sapiens mRNA for activator of S phase Kinase, complete cds
6772	18827	33109	0.87	9.0E-78	11430822	NT	Homo sapiens ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5) (UBE2E3) mRNA
7573	25984		1.06	9.0E-78	11424427	NT	Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA
7825	20773	34150	0.84	9.0E-78	11421735	NT	Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA
7825	20773	34151	0.84	9.0E-78	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H_GS165L15.1), mRNA
7875	20919	34197	0.55	9.0E-78	Q30858.1	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H_GS165L15.1), mRNA
8689	21657	35079	0.5	9.0E-78	11417260	NT	Human T-cell mRNA for glycyl tRNA synthetase, complete cds
8689	21657	35080	0.5	9.0E-78	11417260	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA
9418	22383	35821	5.53	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
9418	22383	35822	5.53	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
9735	22763	36218	0.66	9.0E-78	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10730	23652	37145	0.66	9.0E-78	11438843	NT	Homo sapiens hypothetical protein FLJ20535 (FLJ20535), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10784	23705	37204	1.53	9.0E-79	AF062348.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
10784	23705	37205	1.53	9.0E-79	AF062348.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
11406	24350	37882	4.27	9.0E-79	AY008273.1	NT	Homo sapiens TRAF6-regulated IKK activator 1 beta Uev1A mRNA, complete cds
11841	24724	38310	2.87	9.0E-79	11423927	NT	Homo sapiens suppressor of white apical homolog 2 (SWAP2), mRNA
11841	24724	38311	2.97	9.0E-79	11423927	NT	Homo sapiens suppressor of white apical homolog 2 (SWAP2), mRNA
12115	24985	38388	2.71	9.0E-79	7682451	NT	Homo sapiens KIAA1035 protein (KIAA1035), mRNA
13000	25558	31720	1.55	9.0E-79	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
3765	16797	29708	1.33	8.0E-79	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5195	18204	31078	0.68	8.0E-79	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
3268	18320	29242	7.24	7.0E-79	BE019048.1	EST_HUMAN	601472766T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3876857 3'
12170	25020		2.63	6.0E-79	AA698829.1	EST_HUMAN	294e04.s1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone IMAGE:462568 3' similar to
11824	24707	38230	4.57	5.0E-79	AL163282.2	NT	TR-Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT :
3191	18246		1.35	4.0E-79	8822325	NT	Homo sapiens chromosome 21 segment HS21C082
313	13405	26331	1.48	3.0E-79	AF114488.1	NT	Homo sapiens hypothetical protein FLJ10283 (FLJ10283), mRNA
879	14030	26984	2.02	3.0E-79	AF232708.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3115	16172	29082	1.82	3.0E-79	U09410.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Chn) gene, complete cds
5435	18637	31445	6.05	3.0E-79	AF110322.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
5812	18902	32085	1.61	3.0E-79	AB020698.1	NT	Homo sapiens MSTP016 (MST016) mRNA, complete cds
5841	18931	32115	0.95	3.0E-79	BE789470.1	EST_HUMAN	Homo sapiens mRNA for KIAA0892 protein, partial cds
5841	18931	32116	0.95	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884554 5'
5863	18952	32138	4.05	3.0E-79	11428770	NT	601482143F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884554 5'
5863	18952	32139	4.05	3.0E-79	11428770	NT	Homo sapiens netrin 1 (NTN1), mRNA
6809	18961	33257	0.8	3.0E-79	BE256883.1	EST_HUMAN	Homo sapiens netrin 1 (NTN1), mRNA
7282	18967	33284	3.31	3.0E-79	AB014520.1	NT	601112055F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352885 5'
7282	18967	33285	3.31	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0820 protein, partial cds
8504	21472	34888	1.58	3.0E-79	AF249273.1	NT	Homo sapiens mRNA for KIAA0820 protein, partial cds
9758	22659	36156	0.57	3.0E-79	10835036	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
10712	23634		0.64	3.0E-79	AV698115.1	EST_HUMAN	Homo sapiens tetratricopeptide repeat domain 3 (TTCC3), mRNA
287	13382		2.05	2.0E-79	H63129.1	EST_HUMAN	AV698115 GK/Homo sapiens cDNA clone GKCAHE11 5'
635	13701	26822	1.29	2.0E-79	BE378928.1	EST_HUMAN	y48103.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:208541 3'
928	13981	26835	1.35	2.0E-79	4757841	NT	601159415F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511107 5'
985	14036	26960	4.78	2.0E-79	4885234	NT	Homo sapiens BCL-2-like 2 (BCL2L2) mRNA
985	14036	26961	4.78	2.0E-79	4885234	NT	Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR) mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1038	14082		1.02	2.0E-79	A523747.1	EST_HUMAN	h18107 x1 NCL CGAP_P28 Homo sapiens cDNA clone IMAGE:2118685 3'
1804	14832	27818	0.97	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1804	14832	27820	0.97	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1893	14918	27914	0.92	2.0E-79	7682255	NT	Homo sapiens KIAA0703 gene product (KIAA0703), mRNA
2158	15174	28193	4.97	2.0E-79	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2158	15174	28194	4.97	2.0E-79	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2202	15217	28237	0.91	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fae-associated factor, FAF1 (Faf1 gene)
3933	16973	29887	0.83	2.0E-79	AF170482.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
4198	17224	30113	1.15	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fae-associated factor, FAF1 (Faf1 gene)
4716	17736	30828	0.97	2.0E-79	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21O008
5754	18848		1.25	2.0E-79	AA312223.1	EST_HUMAN	EST182928 Jurkat T-cells VI Homo sapiens cDNA 5' and similar to similar to C. elegans hypothetical protein, cosmid B0303.15
5815	18905	32088	0.88	2.0E-79	11181769	NT	Homo sapiens X transporter protein 3 (XT3), mRNA
6371	19439	32682	1.07	2.0E-79	AB020637.1	NT	Homo sapiens mRNA for KIAA0830 protein, partial cds
7153	18385	31273	0.7	2.0E-79	AF263613.1	NT	Homo sapiens membrane-associated calcium-independent phospholipase A2 gamma mRNA, complete cds
7373	20343	33684	1.74	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 8 (ARHGAP8), transcript variant 4, mRNA
7373	20343	33695	1.74	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 8 (ARHGAP8), transcript variant 4, mRNA
8437	21408	34818	1.13	2.0E-79	4508442	NT	Homo sapiens retinoblastoma-like 1 (p107) (RBL1) mRNA
8862	21828	35252	2.55	2.0E-79	11427428	NT	Homo sapiens hypothetical protein FLJ11009 (FLJ11009), mRNA
9118	22084	35512	0.46	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
9118	22084	35513	0.46	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
9357	22322	35749	1.1	2.0E-79	11432184	NT	Homo sapiens similar to ATPase, H+ transporting, lysosomal (vacuolar proton pump) membrane sector associated protein MB-9 (H. sapiens) (LOC83861), mRNA
10452	23374	36865	3.12	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
10452	23374	36866	3.12	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
11368	24315	37840	3.86	2.0E-79	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 B10310 Homo sapiens cDNA
11368	24315	37841	3.86	2.0E-79	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 B10310 Homo sapiens cDNA
11668	24602		2.62	2.0E-79	AB036532.1	NT	Homo sapiens p53R2 gene for ribonucleotide reductase, exon 9 and complete cds
12207	18350	31296	3.21	2.0E-79	7662357	NT	Homo sapiens KIAA0879 protein (KIAA0879), mRNA
12293	25107	31837	4.8	2.0E-79	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
12524	25254	31804	2.41	2.0E-79	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6739	25666		3.26	1.0E-79	BF363071.1	EST_HUMAN	MIR0-NIN0087-260800-017-b10 NIN0087 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6862	18905	33200	0.51	1.0E-79	A1613480.1	EST_HUMAN	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
6862	18905	33201	0.51	1.0E-79	A1613480.1	EST_HUMAN	TEKTN C1.;
8687	21556	34871	0.73	1.0E-79	BE394211.1	EST_HUMAN	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
11944	24824	38419	2.64	1.0E-79	BF087405.1	EST_HUMAN	TEKTN C1.;
3161	16217	29131	6.25	9.0E-80	AA725848.1	EST_HUMAN	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
3161	16217	29132	6.25	9.0E-80	AA725848.1	EST_HUMAN	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
10373	23296	36772	1.02	9.0E-80	BE768603.1	EST_HUMAN	TEKTN C1.;
11606	24544	38104	8.28	9.0E-80	11433924	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
11606	24544	38105	8.28	9.0E-80	11433924	NT	TEKTN C1.;
3616	16680		1.22	8.0E-80	U84387.1	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
7682	20806	34183	2.95	8.0E-80	11422847	NT	TEKTN C1.;
7682	20806	34184	2.95	8.0E-80	11422847	NT	TEKTN C1.;
8757	22698	36154	1.14	8.0E-80	6005921	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
8757	22698	36155	1.14	8.0E-80	6005921	NT	TEKTN C1.;
7168	18337	31242	0.58	7.0E-80	AF127882.1	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
801	13956	26613	0.7	6.0E-80	AI422197.1	EST_HUMAN	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
1650	14682	27655	2.17	6.0E-80	U84688.1	NT	TEKTN C1.;
2307	15319	28338	1.17	6.0E-80	6631094	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
2307	15319	28339	1.17	6.0E-80	6631094	NT	TEKTN C1.;
4314	17343	30225	1.1	6.0E-80	AB032981.1	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
4314	17343	30226	1.1	6.0E-80	AB032981.1	NT	TEKTN C1.;
5999	18968	32177	1.32	6.0E-80	11421462	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
6194	19288	32503	3.12	6.0E-80	AJ404468.1	NT	TEKTN C1.;
6356	19424	32686	3.81	6.0E-80	11496796	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
6403	19471		0.93	6.0E-80	7682393	NT	TEKTN C1.;
6455	19520	32770	0.88	6.0E-80	M18533.1	NT	U57a08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2281286 3' similar to TR:Q286823 Q286823
8176	22142	35568	3.06	6.0E-80	11528464	NT	TEKTN C1.;

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9176	22142	35569	3.08	6.0E-80	11526484	NT	Homo sapiens G protein-coupled receptor 61 (GPR51), mRNA
9373	22338	35768	1.68	6.0E-80	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
9714	22607	36125	0.94	6.0E-80	AF161495.1	NT	Homo sapiens HSPC146 mRNA, complete cds
9841	22777	36233	0.47	6.0E-80	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
10220	23145	36934	1.55	6.0E-80	U20211.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exon 21
11289	24239	37768	2.43	6.0E-80	11427368	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11538	24498	38054	20.37	6.0E-80	AF226730.1	NT	Homo sapiens Cyt19 mRNA, complete cds
12051	24924	38521	1.94	6.0E-80	AF102265.1	NT	Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds
12304	25787		2.39	6.0E-80	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12506	25243		6.41	6.0E-80	AB0728900.1	NT	Homo sapiens CST gene for carbodiimide sulfotransferase, exon 1, 2, 3, 4, 5
12894	25914		4.47	6.0E-80	AJ193127.1	NT	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
590	13657	26572	2.88	5.0E-80	4508228	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3) mRNA
836	13693	26846	1.49	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
836	13693	26846	1.49	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
1193	14233		0.98	5.0E-80	X91647.1	NT	H. sapiens nct1 gene (exon 12)
1450	14483		2.21	5.0E-80	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2369	15377	28400	1.92	5.0E-80	U89358.1	NT	Human (3) nbt protein homolog mRNA, complete cds
2437	15444	28462	6.37	5.0E-80	AB097865.1	NT	Homo sapiens mRNA for KIAA1434 protein, partial cds
2806	15796	28616	5	5.0E-80	4504282	NT	Homo sapiens H3 histone family, member J (H3FJ) mRNA
4069	17105	29698	1.28	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4069	17105	29698	1.28	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4991	18006	30894	1.63	5.0E-80	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
8700	21688	35091	1.14	5.0E-80	9910283	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9913	22617	36069	15.19	4.0E-80	F25915.1	EST_HUMAN	HSPD13155 HM3 Homo sapiens cDNA clone s4000045F03
218	13318		9.37	3.0E-80	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4738	17758	30653	1.46	3.0E-80	BF085009.1	EST_HUMAN	PMO-GN0018-040900-002-E03 GN0018 Homo sapiens cDNA
4945	17861		3.11	3.0E-80	BE581465.1	EST_HUMAN	QV4-BN0263-040900-241-g10 BN0263 Homo sapiens cDNA
5919	19005	32197	2.02	3.0E-80	A1091675.1	EST_HUMAN	cc23e12.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1567054 3' similar to
1814	14841	27832	4.7	2.0E-80	R35321.1	EST_HUMAN	TR:O35780 O35780 PIG-L;
1877	14902	27802	1.49	2.0E-80	AL444821.1	EST_HUMAN	y068e08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:38080 5'
2071	15088	28106	5.1	2.0E-80	AL044116.2	EST_HUMAN	RET4B7 subtracted retina cDNA library Homo sapiens cDNA clone RET4B7
6374	19442	32684	0.69	2.0E-80	AB23972.1	EST_HUMAN	DKFZp434D1323_r1_434 (synonym: hras3) Homo sapiens cDNA clone DKFZp434D1323 5'
							wn49c710.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2448786 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6374	19442	32885	0.69	2.0E-80	A823872.1	EST_HUMAN	wr49c10.x1 NCL_CGAP_Lu119 Homo sapiens cDNA clone IMAGE:2448786 3'
6977	20200	33830	1.01	2.0E-80	AA582652.1	EST_HUMAN	nm80d01.s1 NCL_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1090177 3'
7098	20032	33335	1.51	2.0E-80	11421830	NT	Homo sapiens Golgi transport complex protein (80 kDa) (GTC80), mRNA
7463	20429	33788	0.81	2.0E-80	T75215.1	EST_HUMAN	yc86f12.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:22851 5' similar to SP-K1CR_XENLA P08802 KERATIN, TYPE I CYTOSKELETAL ENDO B;
8514	22477	35822	1.22	2.0E-80	AW984270.1	EST_HUMAN	EST1378343 MAGE resequences, MAGH Homo sapiens cDNA
10128	23052	36530	0.97	2.0E-80	AJ007378.1	NT	Homo sapiens GGT gene, exon 6
11216	24169	37687	8.06	2.0E-80	AA383382.1	EST_HUMAN	z170f12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR-G191315
340	13429		2.11	1.0E-80	AL168303.2	NT	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN.;
800	13859	26808	1.95	1.0E-80	AF231820.1	NT	Homo sapiens chromosome 21 segment HS21C103
1971	14982		2.82	1.0E-80	AJ732658.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
4867	17874	30762	0.78	1.0E-80	N99520.1	EST_HUMAN	nm0112.x5 NCL_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1076495 3' similar to contains OFR.11 OFR repetitive element;
6400	18503		3.62	1.0E-80	BE386816.1	EST_HUMAN	zs89g07.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:294972 5' similar to contains Alu repetitive element;
6083	19163	32375	6.24	1.0E-80	L10347.1	NT	G01274305F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615433 5'
6948	19704	32980	1.3	1.0E-80	5174540	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
7414	20381	33732	1.08	1.0E-80	AJ224172.1	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial protein, mRNA
7824	20772	34148	2.6	1.0E-80	A1948731.1	EST_HUMAN	Homo sapiens mRNA for lipophilin B
7824	20772	34149	2.6	1.0E-80	A1948731.1	EST_HUMAN	wq25c05.x1 NCL_CGAP_Ku111 Homo sapiens cDNA clone IMAGE:2472286 3'
8573	21541	34981	1.17	1.0E-80	11421211	NT	wq25c05.x1 NCL_CGAP_Ku111 Homo sapiens cDNA clone IMAGE:2472286 3'
9048	22014	35437	0.92	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9048	22014	35438	0.92	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9840	22584	36032	1.26	1.0E-80	AF245218.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9840	22584	36033	1.26	1.0E-80	AF245218.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
10781	23712	37214	1.12	1.0E-80	D63479.2	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
11013	23978	37503	1.72	1.0E-80	11841276	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
11013	23978	37504	1.72	1.0E-80	11841276	NT	Homo sapiens similar to rat myomegalin (LOC64182), mRNA
11443	24386	37928	1.67	1.0E-80	8923939	NT	Homo sapiens similar to rat myomegalin (LOC64182), mRNA
12578	25287	31778	2.27	1.0E-80	11417801	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11488	24431	37980	9.7	8.0E-81	BE394525.1	EST_HUMAN	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
7484	20430	33787	2.97	7.0E-81	AJ822115.1	EST_HUMAN	G0131053F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632070 5'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4414	17441	30331	4.98	6.0E-81	BE256828.1	EST_HUMAN	601111970F1 NIH_MGC 18 Homo sapiens cDNA clone IMAGE:3352840 5'
4414	17441	30332	4.98	6.0E-81	BE256828.1	EST_HUMAN	601111970F1 NIH_MGC 18 Homo sapiens cDNA clone IMAGE:3352840 5'
5355	18460	31329	1.65	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
5355	18460	31330	1.65	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7845	20792	34168	0.66	6.0E-81	AF038680.1	NT	Homo sapiens chromosome 1p33-p34 beta-1,4-galactosyltransferase mRNA, complete cds
6982	22554	36004	1.17	6.0E-81	AA360017.1	EST_HUMAN	EST69129 Fetal lung II Homo sapiens cDNA 5' end
12707	25364	31768	2.08	6.0E-81	BF678022.1	EST_HUMAN	602153688F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4294601 5'
12707	25364	31769	2.08	6.0E-81	BF678022.1	EST_HUMAN	602153688F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4294601 5'
2228	15240	28265	2.27	5.0E-81	BE268042.1	EST_HUMAN	601125505F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3349480 5'
8755	21723	35146	1.57	5.0E-81	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8755	21723	35147	1.57	5.0E-81	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
10006	22833	36396	0.81	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
10008	22833	36397	0.81	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
11908	24789	38378	1.84	5.0E-81	9506834	NT	Homo sapiens hypothetical protein (FLJ11045), mRNA
703	13765	26700	1.21	4.0E-81	AI821435.1	EST_HUMAN	th60612x1 NC1_CGAP_OV23 Homo sapiens cDNA clone IMAGE:2122702 3' similar to TR:Q85560 Q85560
1839	14868	27865	1.36	4.0E-81	AW778612.1	EST_HUMAN	tr98402x1 NC1_CGAP_Cor14 Homo sapiens cDNA clone IMAGE:3035807 3' similar to SW:COPG_BOVIN
3186	16241	29159	4.49	4.0E-81	AB037768.1	NT	P53620 COATOMER GAMMA SUBUNIT
3944	16887	28602	0.89	4.0E-81	AW004608.1	EST_HUMAN	Homo sapiens mRNA for KIAA1345 protein, partial cds
4187	17218	30104	1.85	4.0E-81	AF268306.1	NT	ws60h03x1 NC1_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2505289 3' similar to TR:O43816 O43816
4187	17218	30105	1.85	4.0E-81	AF268306.1	NT	STRIATIN ;
4419	17446	30337	1.1	4.0E-81	8923209	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
7402	20457	33815	0.93	4.0E-81	4157863	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
7628	20589	33952	0.89	4.0E-81	11420544	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
8630	21593	35019	2	4.0E-81	X08989.1	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
8890	21856	35276	3.34	4.0E-81	U20197.1	NT	Homo sapiens calcium channel, voltage-dependent, L type, alpha 2delta subunit (CACNA2) mRNA
8890	21856	35277	3.34	4.0E-81	U20197.1	NT	Homo sapiens ets variant gene 1 (ETV1), mRNA
9581	22543	35994	3.82	4.0E-81	AB018001.1	NT	Human mRNA for amyloid A4(751) protein
10491	23363	36876	1.82	4.0E-81	11425281	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
10531	23453	36950	0.67	4.0E-81	11439065	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
10531	23453	36951	0.67	4.0E-81	11439065	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
							Homo sapiens ligase L DNA, ATP-dependent (LIG1), mRNA
							Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
							Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11519	24460	38010	3.39	4.0E-81	4768085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B) mRNA
11519	24460	38011	3.39	4.0E-81	4768085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B) mRNA
12200	25953	31438	3.45	4.0E-81	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12200	25953	31439	3.45	4.0E-81	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12737	25939	31763	1.71	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12737	25388	31754	1.71	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12678	25472	31728	3.69	4.0E-81	11417874	NT	Homo sapiens transcobalamin II; macrocyte anemia (TCN2), mRNA
1272	14307	27268	10.2	3.0E-81	Y18000.1	NT	Homo sapiens NIF2 gene
1272	14307	27267	10.2	3.0E-81	Y18000.1	NT	Homo sapiens NIF2 gene
2380	15388	28412	1.65	3.0E-81	AF077168.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
3004	16062	28680	5.19	3.0E-81	4506280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
3004	16062	28681	5.19	3.0E-81	4506280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
2844	15904	28828	2.48	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
2844	15904	28829	2.48	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
3787	16828	28735	0.88	2.0E-81	AW611542.1	EST_HUMAN	hg85c01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
8290	21269	34670	0.63	2.0E-81	8923839	NT	Homo sapiens hypothetical protein (LOC55686), mRNA
13032	16828	28735	2.55	2.0E-81	AW611542.1	EST_HUMAN	hg85c01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
4543	17568	30453	3.12	1.0E-81	AA040370.1	EST_HUMAN	z445r08.r1 Soares_pregnant_uterus_Nbt1PU Homo sapiens cDNA clone IMAGE:485825 5' similar to
4675	17696	30593	9.34	1.0E-81	BE047986.1	EST_HUMAN	PIR:S62437 S42437 CDP-diacylglycerol synthase - fruit fly:
5308	18326	38011	3.31	1.0E-81	U87828.1	NT	tz45c04.y1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2281528 5'
5427	18530	31409	3.6	1.0E-81	11432868	NT	Human acornite hydratase (ACO2) gene, exon 3
5427	18530	31410	3.6	1.0E-81	11432868	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5680	18676	31639	0.83	1.0E-81	AA255586.1	EST_HUMAN	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
6737	18831	32009	3.37	1.0E-81	U52351.1	NT	zr85c06.r1 Soares_Nbt1MPu_S1 Homo sapiens cDNA clone IMAGE:882475 5' similar to SW:PR12_HUMAN
5737	18831	32010	3.37	1.0E-81	U52351.1	NT	P49848 DNA PRIMASE 58 KD SUBUNIT 7;
6269	18342	32575	1.55	1.0E-81	BF674641.1	EST_HUMAN	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
6889	19756	33032	0.56	1.0E-81	11420985	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
6899	19756	33033	0.56	1.0E-81	11420985	NT	602137884F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274635 5'
6902	18954	33251	1.26	1.0E-81	AJ133289.1	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
							Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
							Homo sapiens caveolin-1/2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8049	20988	34382	7.53	1.0E-81	11432868	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
10134	23080	36537	7.85	1.0E-81	BE958278.1	EST_HUMAN	601845051F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3830228 5'
10134	23080	36538	7.85	1.0E-81	BE958278.1	EST_HUMAN	601845051F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3830228 5'
10328	23252	36731	4.83	1.0E-81	BE564367.1	EST_HUMAN	601343180F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685483 5'
							ac14008.s1 Stragene HeLa cell s3 637216 Homo sapiens cDNA clone IMAGE:856427 3' similar to SW:YB38_YEAST P38126 HYPOTHETICAL 60.5 KD PROTEIN IN RPS101-RPS13 INTERGENIC REGION:
10483	23385	36878	1.09	1.0E-81	AA630784.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10485	23387	36880	3.01	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10485	23387	36881	3.01	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10874	23784	37298	1.7	1.0E-81	AW897550.1	EST_HUMAN	CM3-NN0059-140400-147-412 NN0059 Homo sapiens cDNA
11425	24369	37805	2.9	1.0E-81	AW844988.1	EST_HUMAN	MR0-CT0008-250589-019 CT0008 Homo sapiens cDNA
11425	24369	37808	2.9	1.0E-81	AW844988.1	EST_HUMAN	MR0-CT0008-250589-019 CT0008 Homo sapiens cDNA
11428	24373	37911	6.55	1.0E-81	AW798187.1	EST_HUMAN	RC3-UM0048-280200-011-a08 UM0048 Homo sapiens cDNA
11429	24373	37912	6.55	1.0E-81	AW798187.1	EST_HUMAN	RC3-UM0048-280200-011-a08 UM0048 Homo sapiens cDNA
11851	24734	38321	2.11	1.0E-81	BF204263.1	EST_HUMAN	601867714F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4110459 5'
12414	25185	31822	4.59	1.0E-81	11418138	NT	Homo sapiens peroxin (similar to apolipoprotein B mRNA editing protein) (DJ742C19.2), mRNA
13	13133	26031	0.94	8.0E-82	AF161408.1	NT	Homo sapiens HSPC288 mRNA, partial cds
107	13133	26031	2.07	8.0E-82	AF161408.1	NT	Homo sapiens HSPC288 mRNA, partial cds
283	13359	26284	2.7	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
815	13873	26821	14.95	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
888	13943	26801	1.44	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
1457	14520	27463	1.38	8.0E-82	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
							Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 2, mRNA
1698	14898	27674	1.7	8.0E-82	6715801	NT	mRNA
4114	17148	30040	0.82	8.0E-82	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4272	17301	30181	0.75	8.0E-82	8923432	NT	Homo sapiens hypothetical protein FLJ20461 (FLJ20461), mRNA
1444	14477		2.53	7.0E-82	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862088 5'
2777	15768	28789	1.8	7.0E-82	AU144050.1	EST_HUMAN	AU144050 HEMBA1 Homo sapiens cDNA clone HEMBA1000752 3'
12053	24928	36524	1.75	7.0E-82	AA683747.1	EST_HUMAN	es68e04.s1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:868342 3'
1680	14712	27890	25.07	4.0E-82	AF081484.1	NT	Homo sapiens alpha-tubulin isoform 1 mRNA, complete cds
5574	18870	31632	0.89	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-362-408 HT0540 Homo sapiens cDNA
5574	18870	31633	0.89	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-362-408 HT0540 Homo sapiens cDNA
5851	18941	32126	0.59	4.0E-82	M25833.1	NT	Human von Willebrand factor gene, exon 9

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12025	24601	38498	7.32	4.0E-82	AB837300.1	EST_HUMAN	wp/5609.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2467624 3' similar to TR-075278
12657	25337		3.69	4.0E-82	AF029701.2	NT	O75278 PKD1;
							Homo sapiens presenilin-1 gene, exons 1 and 2
277	13373	26301	16.34	3.0E-82	4502168	NT	
704	13766	26701	2.76	3.0E-82	BE005705.1	EST_HUMAN	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
788	13847	26794	10.4	3.0E-82	5174702	NT	RC2-BN0120-010400-013-002 BN0120 Homo sapiens cDNA
							Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
871	13927	26885	6.11	3.0E-82	4502168	NT	
1082	14108		53.62	3.0E-82	AA725848.1	EST_HUMAN	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1357	14362	27363	1.01	3.0E-82	AW875073.1	EST_HUMAN	al23a05.a1 Soares_testis_NHT Homo sapiens cDNA clone 1343648 3'
1462	14495	27469	2.61	3.0E-82	AL163285.2	NT	RC8-PT0001-180100-021-B02 PT0001 Homo sapiens cDNA
1917	14941	27837	1.95	3.0E-82	BE813232.1	EST_HUMAN	Homo sapiens chromosome 21 segment HSZ1C083
							RC1-BN0005-280700-018-g04 BN0005 Homo sapiens cDNA
2023	15043	28058	1.2	3.0E-82	4501922	NT	
3285	16339		2.31	3.0E-82	5493811	NT	Homo sapiens adenylylate cyclase activating polypeptide 1 (pituitary) receptor type I (ADCYAP1R1) mRNA
8492	21460	34877	2.7	3.0E-82	11425208	NT	Homo sapiens neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) mRNA
8902	21868	35282	0.77	3.0E-82	11432889	NT	Homo sapiens ankylin-like with transmembrane domains 1 (ANKTM1), mRNA
8902	21868	35293	0.77	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
10183	23108	36590	3.98	3.0E-82	AB028000.1	NT	Homo sapiens contactin 6 (CNTN6), mRNA
10183	23108	36591	3.98	3.0E-82	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
12108	24978	38577	1.6	3.0E-82	11432889	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
12108	24978	38578	1.6	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
569	13666	26578	1.96	2.0E-82	AB023216.1	NT	Homo sapiens contactin 6 (CNTN6), mRNA
569	13666	26580	1.96	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0989 protein, partial cds
1694	14724	27707	2.13	2.0E-82	AL046390.1	EST_HUMAN	Homo sapiens mRNA for KIAA0989 protein, partial cds
2981	16049	28970	0.76	2.0E-82	AL163201.2	NT	Homo sapiens cDNA clone DKFZp434M147 5'
3860	16889	28802	1.07	2.0E-82	D67875.1	NT	Homo sapiens chromosome 21 segment HSZ1C001
4052	17089	29984	0.65	2.0E-82	U76833.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4261	17290	30171	1.07	2.0E-82	4504116	NT	Human integral membrane sarine protease Sgprase mRNA, complete cds
4588	17610	30505	1.09	2.0E-82	AB028019.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4588	17610	30506	1.09	2.0E-82	AB028019.1	NT	Homo sapiens mRNA for KIAA1098 protein, partial cds
							Homo sapiens mRNA for KIAA1098 protein, partial cds
4904	17921	30813	3.21	2.0E-82	AF045555.1	NT	Homo sapiens wbscr1 (WBSR1) and wbscr5 (WBSR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5117	18127	31002	1.53	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5117	18127	31003	1.53	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5546	18643	31583	3.46	2.0E-82	AB018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
6289	19371	32810	4.99	2.0E-82	AF234882.1	NT	Homo sapiens FAM4A1 splice variant a (FAM4A1) mRNA, complete cds
7845	26004		0.88	2.0E-82	AI476428.1	EST_HUMAN	hm21g05.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2157272 3'
8104	21041	34440	0.89	2.0E-82	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8539	21557	34973	0.48	2.0E-82	11431845	NT	Homo sapiens nucleotide binding protein 1 (E. coli MinD like) (NUBP1), mRNA
8848	21616	35038	1.94	2.0E-82	11321570	NT	Homo sapiens slit (Drosophila) homolog 3 (SLIT3), mRNA
9017	21983	35402	0.47	2.0E-82	7657340	NT	Homo sapiens microtubidia (mouse) homolog (MORC), mRNA
9017	21983	35403	0.47	2.0E-82	7657340	NT	Homo sapiens microtubidia (mouse) homolog (MORC), mRNA
10468	23390	36894	1.66	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10468	23390	36895	1.66	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
11600	24538	38065	3.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11600	24538	38066	3.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11638	24575	38140	2.31	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11638	24575	38141	2.31	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
12227	25082		1.94	2.0E-82	N94950.1	EST_HUMAN	z531d10.s1 Soares parathyroid tumor NHRP4 Homo sapiens cDNA clone IMAGE:305203 3'
12760	25403		4.39	2.0E-82	AA011278.1	EST_HUMAN	z01g09.t1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428568 5'
13064	25598		1.53	2.0E-82	11418097	NT	Homo sapiens SRY (sex determining region Y)-box 10 (SOX10), mRNA
594	13681	26574	1.27	1.0E-82	11545921	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
1213	14251		1.09	1.0E-82	BE885106.1	EST_HUMAN	607510859F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3812207 5'
1290	14325	27286	2.11	1.0E-82	BE064988.1	EST_HUMAN	RC4-BT0310-110300-015-110 BT0310 Homo sapiens cDNA
1291	14326	27287	1.07	1.0E-82	AB011110.2	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
9294	22260	35689	1.09	1.0E-82	AB037838.1	NT	Homo sapiens mRNA for KIAA1417 protein, partial cds
10011	22938	36403	0.58	1.0E-82	AB014562.1	NT	Homo sapiens mRNA for KIAA0662 protein, partial cds
10808	23528		1.24	1.0E-82	BF515938.1	EST_HUMAN	UIH-BW1-acc-f-03-0-U1.s1 NC1_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084053 3'
11097	24057	37681	1.87	1.0E-82	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
9085	22031	35454	4.87	9.0E-83	BF672220.1	EST_HUMAN	602150403F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4281561 5'
10637	23559	37058	0.62	9.0E-83	BE263347.1	EST_HUMAN	607117160F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357734 5'
1412	14445	27417	1.55	8.0E-83	BE383973.1	EST_HUMAN	607273346F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614362 5'
1691	15820	27702	4.08	8.0E-83	N66951.1	EST_HUMAN	z44812.s1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:285823 3'
1359	14394	27364	0.99	7.0E-83	AW385529.1	EST_HUMAN	QV4-L1T0016-271298-088-h11 L1T0016 Homo sapiens cDNA
2876	15935		1.92	7.0E-83	AA594655.1	EST_HUMAN	nc012h01.s1 NC1_CGAP_Pher1 Homo sapiens cDNA clone IMAGE:1100497 3' similar to contains Alu repetitive element

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
							7p37a07.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3847893 3' similar to TRCQ9Y318 Q9Y318
4853	17870		7.84	7.0E-83	BF221813.1	EST_HUMAN	DJ207H1.1 ;
6168	18244	32478	0.73	7.0E-83	11428857	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
403	13478	28410	3.07	6.0E-83	M33320.1	NT	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
1802	14830	27817	1.08	6.0E-83	AW573088.1	EST_HUMAN	h31h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833525 3' similar to
3030	16088	29008	0.64	6.0E-83	AW518405.1	EST_HUMAN	SW:YBEB_HAEIN P44471 HYPOTHETICAL PROTEIN H10034. ;
3064	16121		0.97	6.0E-83	AF231818.1	NT	QV4-ST0234-181189-037.405 ST0234 Homo sapiens cDNA
3083	16140	23051	1.03	6.0E-83	AA701457.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
3575	18820	28541	2.84	6.0E-83	11430241	NT	z59c05.s1 Soares_fetal_liver_spleen_1NFL.S1 Homo sapiens cDNA clone IMAGE:435080 3'
5167	18176	31054	1.2	6.0E-83	4827033	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
							Homo sapiens tumor necrosis factor (ligand) superfamily, member 18 (TNFSF18) mRNA
							Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
5388	18471	31342	1.53	6.0E-83	4507868	NT	
6139	18215	32444	1.32	6.0E-83	AJ010770.1	NT	Homo sapiens hypoxanthine gene, exons 1-50
7745	20889	34066	2.1	6.0E-83	11422024	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
10035	22862	36430	2.5	6.0E-83	4505314	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
10127	23053	36531	0.76	6.0E-83	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prip18 (PRP18), mRNA
10127	23063	36532	0.76	6.0E-83	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prip18 (PRP18), mRNA
							sb14e10.s1 Strabagene lung (4637210) Homo sapiens cDNA clone IMAGE:340810 3' similar to contains
11858	24741		2.01	6.0E-83	AA486105.1	EST_HUMAN	THR.L2 THR repetitive element ;
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12179	25027		5.85	6.0E-83	AF240788.1	NT	
945	13898		1.42	5.0E-83	U17883.1	NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
2068	15823		1	5.0E-83	AF006305.1	NT	Homo sapiens 28S proteasome regulatory subunit (SUG2) mRNA, complete cds
3852	16895	28610	0.97	5.0E-83	AL133207.2	NT	Novel human gene mapping to chromosome X
3826	16898	28879	1.02	5.0E-83	4885190	NT	Homo sapiens deoxyribonuclease I (DNASE1), mRNA
5115	18125	31000	14.32	5.0E-83	4557013	NT	Homo sapiens cathepsin (CAT) mRNA
5115	18125	31001	14.32	5.0E-83	4557013	NT	Homo sapiens cathepsin (CAT) mRNA
5245	18253	31124	0.83	5.0E-83	4505902	NT	Homo sapiens phosphatidylinositol 3-kinase, catalytic, gamma polypeptide (PIK3CG) mRNA
							Homo sapiens mannitolase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
641	13707	28828	2.28	4.0E-83	AF224689.1	NT	
3525	16571	29494	1	4.0E-83	BE888078.1	EST_HUMAN	601511580F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913195 5'
999	14050		6.39	3.0E-83	AA398311.1	EST_HUMAN	EST78542 Placenta 1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2788	15780		1.82	3.0E-83	AA632854.1	EST_HUMAN	np87c07.s1 NC1_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:1133282 similar to contains THR12 THR repetitive element;
6730	19788		0.72	3.0E-83	A1217223.1	EST_HUMAN	qf73e06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755682 3'
							cl64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621582 3' similar to TR:Q82814
1816	14843	27834	1.68	2.0E-83	AA983492.1	EST_HUMAN	Q82814 MYELOBLAST KIAA0218.;
							cl64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621582 3' similar to TR:Q82814
1818	14843	27835	1.68	2.0E-83	AA983492.1	EST_HUMAN	Q82814 MYELOBLAST KIAA0218.;
1942	14986	27983	3.01	2.0E-83	N68951.1	EST_HUMAN	za48f12.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:296823 3'
2884	15924	28843	1.98	2.0E-83	BE828684.1	EST_HUMAN	RC8-E10046-280600-013-H12 ET0046 Homo sapiens cDNA
3282	16336		2.14	2.0E-83	11430834	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3788	16829		0.87	2.0E-83	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4363	17390	30272	9.78	2.0E-83	AF202879.1	NT	Homo sapiens hematopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4681	17702	30580	8.03	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
4681	17702	30581	8.03	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
5343	18448	31319	0.94	2.0E-83	11024711	NT	Human carcinoembryonic antigen gene family member 18 (CGM18) gene, exons A1 and B1
5347	18844	31594	1.09	2.0E-83	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
5547	18844	31595	1.09	2.0E-83	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
5945	19031	32224	0.54	2.0E-83	11428081	NT	Homo sapiens membrane protein CH1 (CH1), mRNA
6076	19157	32368	1.21	2.0E-83	BE885401.1	EST_HUMAN	601507482F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909088 5'
7669	20628	33932	5.47	2.0E-83	AF128533.1	NT	Homo sapiens F-box protein Fbx3b (FBL3B) mRNA, partial cds
8103	21039	34438	0.52	2.0E-83	BF105097.1	EST_HUMAN	601822080F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4042318 5'
8175	21145	34551	0.55	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
8175	21145	34552	0.55	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
8319	21288	34702	1.46	2.0E-83	U68707.1	NT	Rattus norvegicus densin-180 mRNA, complete cds
8657	21625	35045	2.5	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
8657	21625	35046	2.5	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
8682	22879	36342	0.46	2.0E-83	5453881	NT	Homo sapiens phosphatase kinase, gamma 1 (muscle) (PHKG1) mRNA
8682	22879	36343	0.46	2.0E-83	5453881	NT	Homo sapiens phosphatase kinase, gamma 1 (muscle) (PHKG1) mRNA
10242	23167	36854	0.43	2.0E-83	BF128748.1	EST_HUMAN	601811127F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053894 5'
10394	23318	36795	2.53	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
10394	23318	36796	2.53	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
10475	23397	36895	1.2	2.0E-83	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
10649	23471	36966	0.74	2.0E-83	AW505600.1	EST_HUMAN	UHF-BNO-arrd-h-07-0-J11 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081852 5'
11195	24150	37681	3.48	2.0E-83	11438448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11272	24024	37749	1.84	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
11272	24224	37750	1.84	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
12802	25428		4.91	2.0E-83	AB011398.1	NT	Homo sapiens gene for AF-6, complete cds
1410	14443	27414	1.58	1.0E-83	4504328	NT	Homo sapiens hydroxycyl-Coenzyme A dehydrogenase/3-ketocyl-Coenzyme A thioester/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1410	14443	27415	1.58	1.0E-83	4504328	NT	Homo sapiens hydroxycyl-Coenzyme A dehydrogenase/3-ketocyl-Coenzyme A thioester/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1453	14488	27481	0.93	1.0E-83	AF105067.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
1453	14488	27482	0.93	1.0E-83	AF105067.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
2885	15882	28881	1.16	1.0E-83	BE863890.1	EST_HUMAN	601607375F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908754 5'
3188	18253	29173	0.65	1.0E-83	7682349	NT	Homo sapiens cell recognition molecule Caspr2 (KIA00868), mRNA
3882	16922	28830	3.33	1.0E-83	AF063768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP80 mRNA, partial cds
4273	17302	30182	2.31	1.0E-83	Z25822.1	NT	H. sapiens gene for mitochondrial dodecanoyl-CoA delta-iscmerase, exon 3
6854	18907	33203	1.63	1.0E-83	A027614.1	EST_HUMAN	alpha8508.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1845431 3' similar to gb:M64241 QM PROTEIN (HUMAN);
3810	16880	28758	3.98	7.0E-84	BE901209.1	EST_HUMAN	601676023F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958953 5'
1298	14333	27294	4.11	6.0E-84	BE838894.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
1298	14333	27295	4.11	6.0E-84	BE838894.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
2407	15414	28438	5.78	6.0E-84	AA776574.1	EST_HUMAN	ae88a03.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:971020 3'
5311	18328		1.9	6.0E-84	AL042883.2	EST_HUMAN	DKFZp434H0322_r1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434H0322 5'
5586	18082	31882	1.69	6.0E-84	AA897338.1	EST_HUMAN	ea47g03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460500 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
5743	18837	32018	1.09	6.0E-84	11426718	NT	Homo sapiens acetyl LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC), mRNA
5743	18837	32019	1.09	6.0E-84	11426718	NT	Homo sapiens acetyl LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC), mRNA
7714	20671	34038	3.36	6.0E-84	BE810371.1	EST_HUMAN	PM0-LT0019-180600-004-F02 LT0019 Homo sapiens cDNA
7855	20886	34289	0.99	6.0E-84	AF038391.1	NT	Homo sapiens pre-mRNA splicing factor (PRP18) mRNA, complete cds
8408	21377	34783	2.05	6.0E-84	BE770189.1	EST_HUMAN	PM4-F10054-160600-004-e10 F10054 Homo sapiens cDNA
715	13777	28712	0.81	5.0E-84	AA382811.1	EST_HUMAN	EST86094 Testis I Homo sapiens cDNA 5' end
3027	16084		1.54	6.0E-84	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
8227	18301	32534	0.49	5.0E-84	AA167678.1	EST_HUMAN	zq39e07.r1 Stratagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632100 5' similar to TR:G483915 G483915 RETROTRANSPOSABLE L1 ELEMENT LRE2 FROM CHROMOSOME 1Q.;

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11871	24753	38334	2.08	5.0E-84	11428740	NT	Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RFX3), mRNA
11884	24843	38437	2.28	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
11884	24843	38438	2.28	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
1409	14442	27413	1.88	4.0E-84	AB85321.1	EST_HUMAN	wa7804.x1 Soares NFL_T_OBC_S1 Homo sapiens cDNA clone IMAGE:2302088 3' similar to
4987	18002	30891	0.88	4.0E-84	4505928	NT	SW.NRDC_HUMAN O43847 NARDILYSIN PRECURSOR:
4988	18003	30892	2.19	4.0E-84	AF069601.2	NT	Homo sapiens polymerase (DNA-directed), alpha (70KD) (POLA2), mRNA
5335	18440	31183	0.53	4.0E-84	AF022835.1	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
5642	18738	31802	1.28	4.0E-84	11388188	NT	Homo sapiens multidrug resistance protein (MRP), exon 13
5642	18738	31803	1.28	4.0E-84	11388188	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
6389	19487	32714	1.88	4.0E-84	AF059650.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
7809	20852	34239	12.53	4.0E-84	11421328	NT	Homo sapiens histone deacetylase 3 (HDAC3) gene, complete cds
9282	22228	35658	0.9	4.0E-84	4557528	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
9282	22228	35659	0.9	4.0E-84	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
11283	24215	37739	5.34	4.0E-84	AB032856.1	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
316	13408	26334	1.92	3.0E-84	AF028200.1	NT	Homo sapiens mRNA for KIAA1130 protein, partial cds
1157	14199	27149	5.95	3.0E-84	4768081	NT	Homo sapiens Bach1 protein homolog mRNA, partial cds
1977	14998	28000	1.24	3.0E-84	5453855	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2024	15044	28057	3.11	3.0E-84	AL068880.1	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
3804	16849	28585	1.16	3.0E-84	AB028898.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
3762	16803	29715	8.28	3.0E-84	AF014459.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
11228	24179		17.2	3.0E-84	AB083801.1	EST_HUMAN	Homo sapiens X-linked juvenile retinoschisis precursor protein (XLR51) mRNA, complete cds
2116	15132	28153	5.88	2.0E-84	BE68397.1	EST_HUMAN	wu20405.x1 Soares Dieckgraebe_colon_NHGD Homo sapiens cDNA clone IMAGE:2520885 3' similar to
2116	15132	28154	5.88	2.0E-84	BE68397.1	EST_HUMAN	gbL06093 60S RIBOSOMAL PROTEIN L18A (HUMAN);
2954	16012	28939	7.08	2.0E-84	AF036943.1	NT	CM1-BT0785-190600-272-508 BT0785 Homo sapiens cDNA
2973	16031	28954	1.35	2.0E-84	X89211.1	NT	CM1-BT0785-190600-272-508 BT0785 Homo sapiens cDNA
5604	18700	31671	0.88	2.0E-84	BF511575.1	EST_HUMAN	Homo sapiens myelin transcription factor 1-like (MYT1L) mRNA, complete cds
5604	18700	31672	0.88	2.0E-84	BF511575.1	EST_HUMAN	H.sapiens DNA for endogenous retroviral like element
6793	19847	33132	0.88	2.0E-84	AF63370.1	EST_HUMAN	UHH-B14-ecf-e-02-0-J1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084983 3'
8392	21361		1.62	2.0E-84	AL288874.1	EST_HUMAN	UHH-B14-ecf-e-02-0-J1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084983 3'
8728	21698	35121	0.58	2.0E-84	AL163204.2	NT	yr68e11.s1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:208324 3'
8728	21698	35122	0.58	2.0E-84	AL163204.2	NT	qm87c09.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1895728 3'
							Homo sapiens chromosome 21 segment HS21C004
							Homo sapiens chromosome 21 segment HS21C004

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9701	22854	36108	0.99	2.0E-84	AU120280.1	EST_HUMAN	AU120280 HEMBB1 Homo sapiens cDNA clone HEMBB1000339 5'
10089	23016	36491	0.55	2.0E-84	H22841.1	EST_HUMAN	Ym48a11.1 Scores Infant brain 1N1B Homo sapiens cDNA clone IMAGE:51983 5' similar to SP-APOH_RAT
12446	26206	31829	3.28	2.0E-84	BF448000.1	EST_HUMAN	P28944 BETA-2-GLYCOPROTEIN 1; nas30a02.x1 Lupsd4_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4080251 3' similar to TR:Q8UGS3 Q8UGS3 DJ758G23.1;
12445	26206	31830	3.28	2.0E-84	BF448000.1	EST_HUMAN	nas30a02.x1 Lupsd4_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4080251 3' similar to TR:Q8UGS3 Q8UGS3 DJ758G23.1;
312	13404	26330	1.44	1.0E-84	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
551	13621	26541	15.79	1.0E-84	4507862	NT	Homo sapiens tyrosine 3-monooxygenase/hypophan 5-monooxygenase activation protein, zeta polypeptide (YVHAZ) mRNA
721	13783	27282	1.16	1.0E-84	11427631	NT	Homo sapiens complement component 5 (C5), mRNA
1286	14331	27282	3.1	1.0E-84	AA084379.1	EST_HUMAN	arn85b11.st Stratiene schizo brain S11 Homo sapiens cDNA clone IMAGE:1623885 3'
2070	15087	28106	2.34	1.0E-84	BE392137.1	EST_HUMAN	601308008F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3626257 5'
2232	16246	28269	1.27	1.0E-84	11427197	NT	Homo sapiens pericentriolar material 1 (PCM1), mRNA
3764	16806	28717	2.47	1.0E-84	AA720851.1	EST_HUMAN	hw12a06.st NCI CGAP_S51 Homo sapiens cDNA clone IMAGE:1239106 3'
4448	17472	30360	3.92	1.0E-84	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4728	17748	30638	2.66	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
4728	17748	30640	2.66	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
4849	17472	30360	2.12	1.0E-84	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
6029	19112	32314	0.86	1.0E-84	11434422	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA uterine water channel=28 kDa erythrocyte integral membrane protein homolog [human, uterus, mRNA, 1340 nt]
6314	18385	32827	1.38	1.0E-84	S73482.1	NT	Novel human gene mapping to chromosome 13
7064	20086	33394	1.44	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7064	20086	33395	1.44	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7314	20265	33628	2.66	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7708	20665	34032	4.72	1.0E-84	8393894	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
7814	20763	34138	0.63	1.0E-84	11430846	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
7859	20763	34139	2.13	1.0E-84	11430846	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
8693	22846	36533	2.91	1.0E-84	6031984	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PP15) mRNA
10128	23054	31285	0.62	1.0E-84	AF224511.1	NT	Homo sapiens Ca2+-binding protein CABP3 (CABP3) gene, exon 6 and partial cds
10150	18337	31285	2.65	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10150	18337	31286	2.65	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
12121	20285	33626	2.67	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
12324	26126		2.03	1.0E-84	11417812	NT	Homo sapiens putative receptor P2X-like 1, orphan receptor (P2RXL1), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12436	26201	31825	2.32	1.0E-84	11418185	NT	Homo sapiens acrinase 2, mitochondrial (ACO2), mRNA
988	14020		1.9	8.0E-85	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
1074	14119	27069	2.21	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Slp mRNA, complete cds
1074	14119	27070	2.21	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Slp mRNA, complete cds
1881	14614	27886	1.31	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1881	14614	27887	1.31	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1684	14715	27895	2.95	9.0E-85	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4280	17309	30188	1.11	9.0E-85	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4913	17930	30821	1.05	9.0E-85	5901979	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
4950	17985	30855	1	9.0E-85	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
1138	14181	27132	13.33	7.0E-85	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
11958	24837		9.76	7.0E-85	AF113210.1	NT	Homo sapiens MSTP030 mRNA, complete cds
11745	24630	38209	2.51	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA
11745	24630	38210	2.51	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA
2340	15350	28371	1.87	5.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5528	18625	31580	1.37	5.0E-85	BF035674.1	EST_HUMAN	601458846F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882402 5'
5528	18625	31581	1.37	5.0E-85	BF035674.1	EST_HUMAN	601458846F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882402 5'
13030	18344		6.19	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1a isoform (CACNA1I) mRNA, complete cds
6271	18344	32576	1.42	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248087 5'
6271	18344	32577	1.42	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248087 5'
7013	20139	33456	0.58	4.0E-85	A628119.1	EST_HUMAN	604601.1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2285808 3'
10937	23857		1.35	4.0E-85	BE078263.1	EST_HUMAN	RC1-BT0823-120200-011-c07 BT0823 Homo sapiens cDNA
12375	25772		1.31	4.0E-85	Z18887.1	EST_HUMAN	HSDHEG008 Stragene cDNA library Human heart, cat#838208 Homo sapiens cDNA clone HEGC03
1302	14338	27301	1.02	3.0E-85	AF06157.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 6
1795	14824	27808	3.9	3.0E-85	T97465.1	EST_HUMAN	ye53g09.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121604 5'
4835	17951	30842	1.37	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
4835	17951	30843	1.37	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
5475	18576	31485	0.65	3.0E-85	11436001	NT	Homo sapiens leucine rich protein (LRP), mRNA
6204	19278	32511	0.66	3.0E-85	11422024	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
6257	19330	32560	5.69	3.0E-85	7682309	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6257	19330	32551	5.69	3.0E-85	7682309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
7140	20116		7.73	3.0E-85	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7628	20596	33949	0.88	3.0E-85	11416870	NT	Homo sapiens GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0621 protein (KIAA0621), mRNA
8204	21174	34594	1.94	3.0E-85	U44953.1	NT	Homo sapiens DENN mRNA, complete cds
8853	21820	35240	1.06	3.0E-85	11525829	NT	Homo sapiens CGL-81 protein (LOC51108), mRNA
8928	22294	35723	3.37	3.0E-85	11430889	NT	Homo sapiens phospholipase C, epsilon (PLOC), mRNA
9661	22818	36272	1.03	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B* (SNRNPB2), mRNA
9661	22818	36273	1.03	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B* (SNRNPB2), mRNA
10949	23769	37268	1.16	3.0E-85	AF088842.1	NT	Homo sapiens phospholipid scramblase mRNA, complete cds
11834	24717	38303	1.72	3.0E-85	5031660	NT	Homo sapiens EGF-like repeats and disocidin-like domains 3 (EDIL3), mRNA
12919	25495		2.14	3.0E-85	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
964	14016	26970	0.97	2.0E-85	7657288	NT	Homo sapiens KIAA0929 protein Msc2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
1041	14087	27039	2.52	2.0E-85	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1418	14451	27424	8.49	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
1418	14451	27425	8.49	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
2239	15293	28277	1.8	2.0E-85	U10525.1	NT	Human DNA polymerase beta gene, exons 12 and 13
2634	14375		14.59	2.0E-85	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3035	16063	28011	1.16	2.0E-85	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4361	17398	30270	4.83	2.0E-85	4505880	NT	Homo sapiens plasminogen (PLG) mRNA
4948	17684	30854	0.93	2.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5178	18187	31084	1.37	2.0E-85	4502212	NT	Homo sapiens arginase, liver (ARG1) mRNA
8628	22572	36022	2.67	2.0E-85	A1760820.1	EST_HUMAN	wf67h08.x1 NC1 CGAP Kd12 Homo sapiens cDNA clone IMAGE:2398431 3' similar to contains element
10007	22834	36398	0.94	2.0E-85	A1914459.1	EST_HUMAN	MSR1 repetitive element;
10825	23547	37048	1.31	2.0E-85	A1886384.1	EST_HUMAN	wf48d03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2331461 3'
2265	15307		2.51	1.0E-85	BE794306.1	EST_HUMAN	wm84d12.x1 NC1 CGAP U12 Homo sapiens cDNA clone IMAGE:2443607 3'
2403	15410	28434	6.6	1.0E-85	BE618392.1	EST_HUMAN	601591416F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945818 5'
2403	15410	28435	6.6	1.0E-85	BE618392.1	EST_HUMAN	601462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3966021 5'
8091	21027	34426	0.52	1.0E-85	BE062951.1	EST_HUMAN	601462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3966021 5'
10140	23066	36542	2.41	1.0E-85	BE257917.1	EST_HUMAN	MF80-BT0284-221169-002-R03 BT0284 Homo sapiens cDNA
10571	23493	36985	0.53	1.0E-85	AW813525.1	EST_HUMAN	601109738F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350563 5'
11268	24221	37745	2.01	1.0E-85	AA77875.1	EST_HUMAN	RC1-ST0198-081089-011-d05 ST0198 Homo sapiens cDNA
							z45f03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11269	24221	37746	2.01	1.0E-85	AA778785.1	EST_HUMAN	244503.s1 Soares_fetal_liver_spleen_1NFLS S1 Homo sapiens cDNA clone IMAGE:453245 3'
11342	24292	37816	2.46	1.0E-86	BF311562.1	EST_HUMAN	6011897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
11342	24292	37817	2.46	1.0E-86	BF311562.1	EST_HUMAN	6011897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
12094	24937	38533	2.37	1.0E-86	AH188420.1	EST_HUMAN	q158a07.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1860468 3'
12328	25289	31780	3.47	1.0E-86	11417862	NT	Homo sapiens calcineurin binding protein 1 (KJAA0330), mRNA
12583	25289	31780	3.37	1.0E-86	11417862	NT	Homo sapiens calcineurin binding protein 1 (KJAA0330), mRNA
1426	14459		12.78	9.0E-86	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867690 5'
6249	19322	32562	1.27	8.0E-86	11424140	NT	Homo sapiens similar to CDC28 protein kinase 1 (H. sapiens) (LOC83041), mRNA
12004	24881	38477	1.57	8.0E-86	4503224	NT	Homo sapiens cytochrome P450, subfamily 11F, polypeptide 1 (CYP2F-1) mRNA
638	13989	26939	0.83	7.0E-86	AA860801.1	EST_HUMAN	q188f08.s1 Soares_parathyroid_tumor_Nb1-IPA Homo sapiens cDNA clone IMAGE:1403559 3'
636	13989	26940	0.83	7.0E-86	AA860801.1	EST_HUMAN	q188f08.s1 Soares_parathyroid_tumor_Nb1-IPA Homo sapiens cDNA clone IMAGE:1403559 3'
6320	19391	32631	0.85	7.0E-86	89686868	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
6320	19391	32632	0.85	7.0E-86	89686868	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
7169	18400	31246	6.12	7.0E-86	11421737	NT	Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA
9086	22062	35487	4.12	7.0E-86	138557.1	NT	Homo sapiens galactose oxidase (GALC) gene, exon 15
10058	22885		1.49	7.0E-86	64533937	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10116	23042	36522	1.67	7.0E-86	11526307	NT	Homo sapiens DICerge syndrome critical region gene 6 (DGCR6), mRNA
1297	14332	27293	3.29	6.0E-86	4505482	NT	Homo sapiens oxoglutarate dehydrogenase (lipoamide) (OGDH) mRNA
212	13312	26241	1.75	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
6151	18228	32465	10.89	4.0E-86	BE265943.1	EST_HUMAN	601176888F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531953 5'
11572	13312	26241	2.44	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
5677	18772	31944	6.64	3.0E-86	AW340946.1	EST_HUMAN	x282h12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
8605	21673	34888	1.12	3.0E-86	AV722328.1	EST_HUMAN	AV722328 HTB Homo sapiens cDNA clone HTBBS04 5'
10581	23503	36895	3.26	3.0E-86	BE886476.1	EST_HUMAN	601508888F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911903 5'
10581	23503	36896	3.26	3.0E-86	BE886476.1	EST_HUMAN	601508888F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911903 5'
11784	23919	37437	5.6	3.0E-86	AE68240.1	EST_HUMAN	tut18b02.x1 NCI_CGAP_F728 Homo sapiens cDNA clone IMAGE:2261371 3'
11842	24725	36312	1.56	3.0E-86	AV690469.1	EST_HUMAN	AV690469 GKC Homo sapiens cDNA clone GKCBSE02 5'
12295	25784		1.35	3.0E-86	BE410354.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:36336783 5'
288	13362	26286	1.83	2.0E-86	AA306284.1	EST_HUMAN	EST1177232 Jurkat T-cells VI Homo sapiens cDNA 5' end
414	13487		2.72	2.0E-86	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1194	14234	27189	2.88	2.0E-86	N59977.1	EST_HUMAN	yzt19a08.r1 Soares_multiple_sclerosis_2N1HMSF Homo sapiens cDNA clone IMAGE:283478 5'
2201	15216	28238	2.54	2.0E-86	9835487	NT	Human endogenous retrovirus, complete genome
2277	15290	28316	1.14	2.0E-86	AB033103.1	NT	Homo sapiens mRNA for KIAA1277 protein, partial cds
3426	16474	28393	1.47	2.0E-86	AW668142.1	EST_HUMAN	EST378215 IMAGE resequences, MAGI Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3769	16900	29711	2.55	2.0E-86	AF166778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3759	16900	29712	2.55	2.0E-86	AF166778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
4070	17108		3.01	2.0E-88	AW515742.1	EST_HUMAN	h887g08.x1 NC1 CGAP_G08 Homo sapiens cDNA clone IMAGE:2916542 3'
4828	17845	30745	3.3	2.0E-88	AF058490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
5972	19057	32267	1.53	2.0E-88	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5972	19057	32258	1.53	2.0E-88	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
							Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC883214), mRNA
7277	25872	33314	0.81	2.0E-86	11419428	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
8343	21312	34726	0.77	2.0E-88	UB4744.1	NT	Homo sapiens chromosome 21 segment HS21C027
8861	21828		0.53	2.0E-86	AL163227.2	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8820	21886	35312	2.44	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8820	21886	35313	2.44	2.0E-86	11437135	NT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
9254	22220	35651	1.48	2.0E-86	10863876	NT	Homo sapiens chromosome segregation 1 (yeast homolog-like) (CSE1L), mRNA
8673	22828	36080	2.12	2.0E-86	11422084	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10814	23735	37237	2.88	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10814	23735	37238	2.88	2.0E-86	11545846	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10869	23789	37289	1.63	2.0E-86	AB037832.1	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P-1), mRNA
12732	25385	31750	2.92	2.0E-86	11419180	NT	Homo sapiens gene for AF-6, complete cds
12901	25485		6.37	2.0E-86	AB011369.1	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1) mRNA
1601	14653	27609	1.28	1.0E-86	4828855	NT	Homo sapiens fibulin 5 (FBLN5) mRNA
3176	16231	28147	1.52	1.0E-86	5463649	NT	Homo sapiens gamma-glutamyl transpeptidase mRNA, complete cds
3246	16304	28228	2.61	1.0E-86	L20492.1	NT	Homo sapiens chromosome 21 segment HS21C009
3307	16360	28279	2.18	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
3307	16360	28280	2.18	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
3698	17008	28921	1.01	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
3698	17008	28922	1.01	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4293	17322	30202	5.56	1.0E-86	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4651	17672	30559	1.12	1.0E-86	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
5632	18728	31889	1.44	1.0E-86	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5430	18533		1.78	9.0E-87	AI150703.1	EST_HUMAN	qb77c09.x1 Soares fetal heart Nih-H19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7881	20639	34001	1.73	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
7881	20639	34002	1.73	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
480	13552	28480	82.88	8.0E-87	X62245.1	NT	O. cuniculus mRNA for elongation factor 1 alpha
2304	16316	28336	3.11	7.0E-87	BF063211.1	EST_HUMAN	785802.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3322779 3'
2304	16316	28337	3.11	7.0E-87	BF063211.1	EST_HUMAN	785802.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3322779 3'
6540	18602	32864	1.01	7.0E-87	AW880338.1	EST_HUMAN	MR0-NT0039-020500-004-471 NT0039 Homo sapiens cDNA
8531	21489	34815	2.59	7.0E-87	BF352778.1	EST_HUMAN	IL3-HT0619-060700-188-D10 HT0619 Homo sapiens cDNA
8809	21132	34535	0.86	7.0E-87	BE712861.1	EST_HUMAN	IL5-HT0702-160600-103-408 HT0702 Homo sapiens cDNA
10431	23353	36837	3.41	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
10431	23353	36838	3.41	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
10834	25703	37703	0.48	7.0E-87	A1081665.1	EST_HUMAN	α58h01.s1 Scores_Nhr-MPp_S1 Homo sapiens cDNA clone IMAGE:1880657 3'
11237	24180	37709	10.09	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
11237	24180	37709	10.09	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
3538	16584	28507	0.78	6.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
6501	18821	32888	1.84	6.0E-87	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
11079	24041		6.13	6.0E-87	11432444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC83102), mRNA
1162	14204	27157	1.88	5.0E-87	AA362811.1	EST_HUMAN	EST186094 Testis Homo sapiens cDNA 5' end
12585	14204	27157	2	5.0E-87	AA362811.1	EST_HUMAN	EST186094 Testis Homo sapiens cDNA 5' end
887	14018	28972	0.98	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1176	14217	27172	15.32	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
2045	15064	28084	1.49	4.0E-87	AB007925.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
3478	16524	29448	1.57	4.0E-87	6174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5307	18310	31167	0.98	4.0E-87	4759073	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 16 (SCYA16) mRNA
5307	18310	31168	0.98	4.0E-87	4759073	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 16 (SCYA16) mRNA
5521	18620	31554	5.85	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLLOCATION VARIANT 2)
5844	18834	32118	0.55	4.0E-87	U85429.1	NT	Human transcription factor NFI1x3 mRNA, complete cds
6163	18238	32489	4.54	4.0E-87	BE247284.1	EST_HUMAN	TCBPAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBPAP4051
7933	20875	34284	0.5	4.0E-87	11425281	NT	Homo sapiens KIAA1072 protein (KIAA1072), mRNA
7933	20875	34285	0.5	4.0E-87	11425281	NT	Homo sapiens KIAA1072 protein (KIAA1072), mRNA
8050	20987	34383	0.61	4.0E-87	L48524.1	NT	Homo sapiens tuberlin (TSC2) gene, exon 10
9583	22545	35898	0.47	4.0E-87	AF223470.1	NT	Homo sapiens KIAA0971-1 protein (KIAA0971-1) mRNA, complete cds

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11600	24443	37994	5.12	4.0E-87	M60878.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
12078	25839	31428	1.47	4.0E-87	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12678	25839	31428	1.47	4.0E-87	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12825	25444		3.11	4.0E-87	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
2767	15779	28796	4.73	2.0E-87	4888420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4), mRNA
2859	16017		0.79	2.0E-87	BF327820.1	EST_HUMAN	QV0-BN0148-050600-254-a03 BN0148 Homo sapiens cDNA
3768	16838	28745	0.9	2.0E-87	AU116835.1	EST_HUMAN	AU116835 HEMBA1 Homo sapiens cDNA clone HEMBA100307 5'
4951	17868	30856	1.84	2.0E-87	BF376311.1	EST_HUMAN	CM0-TN0038-150900-552-h08 TN0038 Homo sapiens cDNA
4998	18013	30900	0.88	2.0E-87	BE175478.1	EST_HUMAN	RC6-HT0580-200300-031-G04 HT0580 Homo sapiens cDNA
5744	18838	32020	8.87	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE3843730 5'
5744	18838	32021	8.87	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE3843730 5'
6460	19525		3.73	2.0E-87	BE567189.1	EST_HUMAN	601341383F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE3883348 5'
6857	19910	33205	1.12	2.0E-87	N48128.1	EST_HUMAN	W21e07.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE243388 5'
6948	20172	33485	0.84	2.0E-87	AV654143.1	EST_HUMAN	AV654143 GLC Homo sapiens cDNA clone GLCDSG04 3'
7379	20349	33700	1.31	2.0E-87	BE294432.1	EST_HUMAN	601178032F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE3631511 5'
7438	20403	33757	0.81	2.0E-87	11433048	NT	Homo sapiens lect domain and RLD 2 (HERC2), mRNA
7688	20844	34008	37.21	2.0E-87	N48128.1	EST_HUMAN	W21e07.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE243388 5'
7851	20892	34284	38.03	2.0E-87	N48128.1	EST_HUMAN	W21e07.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE243388 5'
8738	21708	35130	13.21	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EC 5.2.1.8)
10144	23070		5.58	2.0E-87	BE531136.1	EST_HUMAN	601278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE3810539 5'
1186	15818		3.71	1.0E-87	7705683	NT	Homo sapiens putative glycoprotein transfer protein (LOC51054), mRNA
3723	16768	28677	4.15	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3746	16788	28700	2.03	1.0E-87	4758827	NT	Homo sapiens neuraxin III (NRXN3), mRNA
5152	18182	31042	1.98	1.0E-87	U60948.1	NT	Rattus norvegicus taste bud receptor protein TB 641 (TB 641) gene, complete cds
6352	19421	32662	1.94	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6362	19421	32663	1.94	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
7383	20353	33704	0.84	1.0E-87	AF039517.1	NT	Homo sapiens corticotroph-releasing factor type 1 receptor gene, exon 8
7383	20353	33705	0.84	1.0E-87	AF039517.1	NT	Homo sapiens corticotroph-releasing factor type 1 receptor gene, exon 8
7389	20358	33710	1.03	1.0E-87	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
7628	20588	33851	1.17	1.0E-87	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7783	20736	34108	0.85	1.0E-87	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
8068	21005	34403	0.54	1.0E-87	4505528	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
8453	21422	34837	11.12	1.0E-87	AF214562.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds

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Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9260	22226	36655	0.97	1.0E-87	AB022818.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
9260	22226	36656	0.97	1.0E-87	AB022818.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
9991	22918	36394	6.68	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0278-050700-012-E02 BN0278 Homo sapiens cDNA
9991	22918	36395	6.68	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0278-050700-012-E02 BN0278 Homo sapiens cDNA
10739	23961	37155	3.11	1.0E-87	M84428.1	NT	Human L-plastin mRNA, 5' and
11084	24045	37587	1.78	1.0E-87	5728867	NT	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
12676	25978		1.48	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
1108	14152	27102	6.48	9.0E-88	AF167465.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1351	14388	27355	2.56	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1369 protein, partial cds
1351	14388	27356	2.56	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1369 protein, partial cds
2130	15147	28182	1.14	9.0E-88	7661701	NT	Homo sapiens DKFZP588P1822 protein (DKFZP588P1822), mRNA
3642	16685	29601	0.89	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4298	17327	30207	3.27	9.0E-88	X91829.1	NT	H. sapiens ECE-1 gene (exon 9)
4298	17327	30208	3.27	9.0E-88	X91829.1	NT	H. sapiens ECE-1 gene (exon 9)
5038	18051	30831	1	9.0E-88	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
9375	22340	35771	3.69	6.0E-88	AF003628.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1845	14871		1.13	5.0E-88	7661857	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2647	15644	28668	5.45	5.0E-88	N98398.1	EST_HUMAN	K9719F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
3013	16071	28981	0.91	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3023	16080	29002	0.77	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3023	16080	29003	0.77	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3400	16449		2.76	5.0E-88	A1693217.1	EST_HUMAN	wf88108.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2336789 3' similar to contains Alu repetitive element/contains element MER22 MER22 repetitive element;
6836	20160	33481	3.32	5.0E-88	H10632.1	EST_HUMAN	ym06b10.r1 Soares infant brain INIB Homo sapiens cDNA clone IMAGE:47129 5'
8261	21230	34639	2.44	5.0E-88	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
9666	22919	36070	0.57	5.0E-88	BF680208.1	EST_HUMAN	602154958F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285775 5'
12435	14871		1.73	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
1332	14367	27338	1.49	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
1332	14367	27337	1.49	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
5185	18194	31069	0.81	4.0E-88	BF670714.1	EST_HUMAN	602149762F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4280975 5'
7454	20420	33775	1.35	4.0E-88	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11818	24701	38282	3.12	4.0E-88	7661947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
11818	24701	38283	3.12	4.0E-88	7661947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
733	13794	28731	0.85	3.0E-88	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
1828	14856		1.78	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259), mRNA
2938	16016	28944	2.51	3.0E-88	N68951.1	EST_HUMAN	z48f12.s1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:286823 3'
4239	17298	30175	0.93	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4269	17298	30176	0.93	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4504	17529		3.04	3.0E-88	11423300	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
6372	18477	31350	2.45	3.0E-88	11423367	NT	Homo sapiens valosin-containing protein (VCP), mRNA
5688	18761	31830	4.05	3.0E-88	9969898	NT	Homo sapiens polycythemia rubra vera 1; cell surface receptor (PRV1), mRNA
5789	18861	32063	3.82	3.0E-88	11420697	NT	Homo sapiens viral simian leukemia viral oncogene homolog A (res related) (RALA), mRNA
6286	19357	32563	0.95	3.0E-88	11417370	NT	Homo sapiens interleukin 13 (IL13), mRNA
6553	25682	32877	0.77	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6553	25682	32878	0.77	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7287	20002	33302	15.04	3.0E-88	AF279285.1	NT	Homo sapiens putative anion transporter 1 mRNA, complete cds
7788	20741	34114	8.35	3.0E-88	11436400	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
8253	21222	34632	10.99	3.0E-88	11421728	NT	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA
8338	21508	34923	1.28	3.0E-88	AF034374.1	NT	Homo sapiens myoblastum cofactor biosynthesis protein A and myoblastum cofactor biosynthesis protein C mRNA, complete cds
9789	21112	34512	2.14	3.0E-88	11528262	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
10288	23213	36596	0.74	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
10288	23213	36697	0.74	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
10316	23240	36721	0.89	3.0E-88	11439065	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
12088	24958	38554	3.65	3.0E-88	4557502	NT	Homo sapiens cubilin (hirsute factor-cubilin receptor) (CUBN) mRNA
12421	25191		7.12	3.0E-88	11417974	NT	Homo sapiens transcalabrin II; macrocyclic anemita (TCN2), mRNA
1037	14083	27033	61.67	2.0E-88	7305188	NT	Homo sapiens Caldesin, presenilin-binding protein, EF hand transcription factor (CSEN), mRNA
1828	14681	27637	1.66	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1765	14784	27779	4.07	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4455	17481	30369	1.88	2.0E-88	5031688	NT	Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA
6016	18089	32300	5.17	1.0E-88	AW139565.1	EST_HUMAN	UI-H-B11-aaa-d-04-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6016	18089	32301	5.17	1.0E-88	AW139565.1	EST_HUMAN	UI-H-B11-aaa-d-04-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6802	19656	33141	23.82	1.0E-88	AB007677.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6802	19656	33142	23.82	1.0E-88	AB007677.1	NT	Homo sapiens KIAA0417 mRNA, complete cds

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Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328	20300	33844	1.29	1.0E-88	AI808934.1	EST_HUMAN	wi70a121 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2476808 3'
7390	20369	33711	3.91	1.0E-88	AA488881.1	EST_HUMAN	aa54a11.a1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:824732 3' similar to WP:B0272.2
8478	21445	34882	0.47	1.0E-88	AF135183.1	NT	CE00851 ;
9697	22801	38050	1.09	1.0E-88	AA190388.1	EST_HUMAN	Homo sapiens Recq helicase 5 (RECQ5) gene, alternative splice products, complete cds
9838	22865	38327	2.73	1.0E-88	AL043314.2	EST_HUMAN	zp87c02.r1 Stragene HeLa cell c3 837216 Homo sapiens cDNA clone IMAGE:627170 5' similar to SW:POL1 HUMAN P10288 RETROVIRUS-RELATED POLYPROTEIN ;
11773	23828	37449	3.86	1.0E-88	AA891479.1	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
12840	25324	37774	3.66	8.0E-89	AL183246.2	NT	os91g03.e1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1612768 3' similar to gb:M16342
11298	24248	37774	3.66	8.0E-89	AL183246.2	EST_HUMAN	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);
2745	16738	28765	1.74	8.0E-89	BES11557.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
7118	20062	33358	1.21	8.0E-89	11421514	NT	Homo sapiens transgelin 2 (TAGLN2), mRNA
433	13807	26440	1.21	7.0E-89	7657213	NT	801142409F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506188 5'
433	13507	26441	1.21	7.0E-89	7657213	NT	Homo sapiens similar to serpin domain, immunoglobulin domain (lg), short basic domain, secreted, (serpin) 3A (H. sapiens) (LOC83232), mRNA
4919	17936	30828	2.95	7.0E-89	4557380	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
4967	17982	30872	4.02	7.0E-89	AL045748.1	EST_HUMAN	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5505	18605	31534	1.22	7.0E-89	X98832.1	NT	Homo sapiens complement component 8, beta polypeptide (C8B) mRNA
5505	18605	31535	1.22	7.0E-89	X98832.1	NT	DKFZp434E248_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434E248 5'
6477	19542	32789	0.77	7.0E-89	7549808	NT	H. sapiens CLN3 gene, complete CDS
6477	19542	32789	0.77	7.0E-89	7549808	NT	H. sapiens CLN3 gene, complete CDS
6477	19542	32789	0.77	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
7741	20685	34060	1.42	7.0E-89	11420764	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
8211	21180	34589	0.57	7.0E-89	11417118	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
8211	21180	34590	0.57	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8823	21790	35212	3.88	7.0E-89	X02923.1	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10897	23817	37324	1.26	7.0E-89	X62048.1	NT	Human 85-kilodalton phosphoprotein (p85) mRNA, complete cds
10897	23817	37325	1.26	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10913	23833	37347	1.11	7.0E-89	AB020680.1	NT	H. sapiens Wee1 hu gene
10913	23833	37348	1.11	7.0E-89	AB020680.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
1025	14071	27022	1.23	6.0E-89	5903114	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
2223	15237	28261	1.17	6.0E-89	4506124	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
2440	15447	28464	0.99	6.0E-89	4507788	NT	Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4) mRNA
2440	15447	28466	0.99	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
2440	15447	28466	0.99	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4667	17688	30573	4.04	6.0E-89	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
4667	17688	30574	4.04	6.0E-89	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
6111	18121	30995	3.41	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
6111	18121	30996	3.41	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
7842	20789	34164	0.94	4.0E-89	BE782749.1	EST_HUMAN	QV3-NT0022-080800-219-g03 NT0022 Homo sapiens cDNA
2888	15847	28883	1.1	3.0E-89	AW978181.1	EST_HUMAN	EST388280 MAGE resequencing, MAGN Homo sapiens cDNA
7347	20317	33683	1.25	3.0E-89	A1217359.1	EST_HUMAN	qh17b06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844815 3'
11151	24111	37636	1.79	3.0E-89	N57357.1	EST_HUMAN	yw86e11.1 Soares_placenta_8b5weeks_2Nblp8b5w Homo sapiens cDNA clone IMAGE:266148 5' similar to SW_P14K_HUMAN P42358 PHOSPHATIDYLINOSITOL 4-KINASE ALPHA:
127	13481	28416	0.88	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
127	13481	28417	0.88	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
408	13481	28416	0.84	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
408	13481	28417	0.84	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
531	13602	28520	0.93	2.0E-89	AB037763.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
2882	15951	28887	1.71	2.0E-89	A1222065.1	EST_HUMAN	qg96c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSFERASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
3565	16611	28532	0.85	2.0E-89	AA759149.1	EST_HUMAN	sh70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
3565	16611	28533	0.85	2.0E-89	AA759149.1	EST_HUMAN	sh70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
4169	17200	30086	1.41	2.0E-89	AF088897.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4180	17211	30088	4.98	2.0E-89	X58742.1	NT	H.sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4180	17211	30089	4.98	2.0E-89	X58742.1	NT	H.sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4376	17404	30284	0.83	2.0E-89	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4524	17549	30437	1.1	2.0E-89	AL163203.2	NT	Homo sapiens GGT gene, exon 5
5416	18518	31600	1.39	2.0E-89	BE541744.1	EST_HUMAN	601066988F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452423 5'
5558	18655	31600	2.77	2.0E-89	AB007546.1	NT	Homo sapiens gene for LECT2, complete cds
5896	18975	32167	1.89	2.0E-89	U03985.1	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
6335	19404	32844	0.87	2.0E-89	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C005
7831	20874	34263	4.07	2.0E-89	U81004.1	NT	Human GT24 (GT24) mRNA, partial cds
8266	21235	34648	2.9	2.0E-89	11428801	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8760	21727	35149	0.94	2.0E-89	AL245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
8808	22612	36095	0.87	2.0E-89	AB037764.1	NT	Homo sapiens mRNA for KIAA1333 protein, partial cds
10169	23004	36572	1.11	2.0E-89	AF170814.1	NT	Homo sapiens CabP5 (CABP5) gene, exon 5
10169	23094	36573	1.11	2.0E-89	AF170814.1	NT	Homo sapiens CabP5 (CABP5) gene, exon 5
11701	24686	38243	2.83	2.0E-89	11434411	NT	Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
11896	24777	38363	3.04	2.0E-89	11433673	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
12026	24902	38497	1.63	2.0E-89	U10892.1	NT	Human IMAGE-7 antigen (IMAGE7) pseudogene, complete cds
11903	24784	38372	5.65	1.0E-89	BF198052.1	EST_HUMAN	h181d09.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
11903	24784	38373	5.65	1.0E-89	BF198052.1	EST_HUMAN	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN;
8569	21537	34957	1.77	9.0E-90	AL163246.2	NT	h181d09.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
8569	21537	34958	1.77	9.0E-90	AL163246.2	NT	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN;
1064	14110	27059	1.93	8.0E-90	AL163246.2	NT	h181d09.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
1065	14110	27059	2.43	8.0E-90	AL163246.2	NT	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN;
1333	15884	27338	4.85	8.0E-90	BE670561.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
1333	15884	27339	4.85	8.0E-90	BE670561.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
8906	21672	35298	0.78	8.0E-90	BE177630.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
11374	24321	37848	1.68	8.0E-90	AA705222.1	EST_HUMAN	7636f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
11374	24321	37849	1.68	8.0E-90	AA705222.1	EST_HUMAN	7636f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
837	13894		3.74	7.0E-90	AF223391.1	NT	RC1-HT0598-120400-022-508 HT0598 Homo sapiens cDNA
8767	21734		2.07	7.0E-90	AA762977.1	EST_HUMAN	282g10.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
9317	22282	35712	1.82	7.0E-90	BE962525.2	EST_HUMAN	282g10.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
9317	22282	35713	1.82	7.0E-90	BE962525.2	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10495	23417	36915	2.08	7.0E-90	H69849.1	EST_HUMAN	a63408.s1 Soares testis_NHT Homo sapiens cDNA clone 1375503 3'
10495	23417	36916	2.08	7.0E-90	H69849.1	EST_HUMAN	a63408.s1 Soares testis_NHT Homo sapiens cDNA clone 1375503 3'
10821	23742	37243	0.58	7.0E-90	BF626089.1	EST_HUMAN	60165583R1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3855824 3'
3081	16138	29049	0.98	6.0E-90	X91826.1	NT	60165583R1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3855824 3'
3081	16138	29050	0.98	6.0E-90	X91826.1	NT	60165583R1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3855824 3'
							y86a04.s1 Soares fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11598 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;
							y86a04.s1 Soares fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11598 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;
							602071208F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4214257 5'
							H.sapiens ECE-1 gene (exon 6)
							H.sapiens ECE-1 gene (exon 6)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4254	17283	30164	9.77	6.0E-00	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4254	17283	30165	9.77	6.0E-00	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
6097	19176	32393	3.07	6.0E-00	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
6097	19176	32394	3.07	6.0E-00	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
8670	21638	35061	3.16	6.0E-00	4604794	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
8670	21638	35062	3.16	6.0E-00	4504794	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
158	13259		25.61	5.0E-00	AB056344.1	NT	Homo sapiens TOL8 gene, exon 1-10b
1197	14237	27192	1.84	5.0E-00	U80228.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1838	14863	27880	1.33	5.0E-00	A1222095.1	EST_HUMAN	q980c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSFERASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
1838	14863	27881	1.33	5.0E-00	A1222095.1	EST_HUMAN	q980c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSFERASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
2862	15563	28582	2.8	5.0E-00	AF114487.1	NT	Homo sapiens Intersectin long isoform (ITSN) mRNA, complete cds
4571	17693	30487	1.32	5.0E-00	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4583	17614	30508	0.7	5.0E-00	AL183201.2	NT	Homo sapiens chromosome 21 segment HS21O001
5672	18787	31939	2.66	5.0E-00	Z18411.1	NT	H. sapiens mRNA encoding phospholipase c
5690	18785		0.61	5.0E-00	AF008915.1	NT	Homo sapiens EVI5 homolog mRNA, complete cds
5777	18869	32052	1.34	5.0E-00	AB015617.1	NT	Homo sapiens ELKS mRNA, complete cds
5960	18767	31939	2.22	5.0E-00	Z18411.1	NT	H. sapiens mRNA encoding phospholipase c
6894	19846	33242	0.73	5.0E-00	8910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC56634), mRNA
6894	19846	33243	0.73	5.0E-00	8910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC56634), mRNA
7423	20390	33741	2.09	5.0E-00	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7423	20390	33742	2.09	5.0E-00	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7813	20762	34198	8.82	5.0E-00	4557258	NT	Homo sapiens adenylate cyclase 9 (ADCY9) mRNA
8636	21604	35028	4.98	5.0E-00	11346483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
10039	22866	36493	1.13	5.0E-00	11419429	NT	Homo sapiens similar to ecdonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
10644	23566	37063	0.74	5.0E-00	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10777	23698	37196	0.53	5.0E-00	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10777	23698	37197	0.53	5.0E-00	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10813	23734	37236	5.86	5.0E-00	11493721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10871	23781	37281	0.87	5.0E-90	7682051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10871	23781	37282	0.87	5.0E-90	7682051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
12872	25508		2.88	5.0E-90	AB011388.1	NT	Homo sapiens gene for AF-6, complete cds
12820	25498		4.68	5.0E-90	AF523398.1	EST_HUMAN	ar78h05.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2128761 3'
302	13396	28323	2.82	4.0E-90	AF231820.1	NT	Homo sapiens chromosome 21 unknown mRNA
302	13396	28324	2.82	4.0E-90	AF231820.1	NT	Homo sapiens chromosome 21 unknown mRNA
1088	14132	27084	4.74	4.0E-90	4505316	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
1688	14728	27711	8.84	4.0E-90	X99033.1	NT	H. sapiens gene encoding discoidin receptor tyrosine kinase, exon 16
4686	17707	30600	6.15	4.0E-90	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4835	17852	30751	2.4	4.0E-90	AB039070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4856	17873	30781	1.98	4.0E-90	AB03907.1	NT	Human prothormone converting enzyme (NEC2) gene, exon 8
12134	25003	38610	1.75	4.0E-90	D31124.1	EST_HUMAN	HUML12582 Human fetal lung Homo sapiens cDNA 5'
8185	21155	34583	1.72	3.0E-90	BF516168.1	EST_HUMAN	UIH-BW1-amy-b-04-Q-U1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
8185	21155	34584	1.72	3.0E-90	BF516168.1	EST_HUMAN	UIH-BW1-amy-b-04-Q-U1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
11851	24830	39428	67.58	3.0E-90	BE563833.1	EST_HUMAN	601335244F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689147 5'
215	13315	28243	5.41	2.0E-90	BE537913.1	EST_HUMAN	601087378F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453834 5'
1177	14218	27173	48.4	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1177	14218	27174	48.4	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3858	16898	29801	2.03	2.0E-90	A138213.1	EST_HUMAN	qc54c02.x1 Soares_placenta_8to8weeks_2NblIP8b6W Homo sapiens cDNA clone IMAGE:1713410 3'
4714	17734	30627	1.17	2.0E-90	AB006827.1	NT	similar to SW:OLF3_MOUSE P23275 OLFACTORY RECEPTOR OR3.;
4947	17963	30853	9.22	2.0E-90	5728865	NT	Homo sapiens mRNA for KIAA0288 gene, partial cds
5870	18959	32147	0.57	2.0E-90	11525901	NT	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
5870	18959	32148	0.57	2.0E-90	11525901	NT	Homo sapiens RalP2 interacting protein 8 (RPIP8), mRNA
5879	18968	32169	4.7	2.0E-90	AW672888.1	EST_HUMAN	ba49d05.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2889881 5' similar to TR:O75208 O75208 HYPOTHETICAL 35.5 KD PROTEIN.;
10149	23075	38550	8.23	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (h. sapiens) (LOC83484), mRNA
10149	23075	38551	8.23	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (h. sapiens) (LOC83484), mRNA
10319	23243	36722	1.27	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004785 5'
10319	23243	36723	1.27	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004785 5'
11788	23953	37475	5.5	2.0E-90	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
276	13372	26300	3.98	1.0E-60	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (presenile dementia, Alzheimer disease) (APP), mRNA
374	15812	26389	1.13	1.0E-60	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
375	15812	26389	2.04	1.0E-60	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
698	13768	26889	2.55	1.0E-60	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
698	13768	26890	2.65	1.0E-60	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
731	13782	26728	17.02	1.0E-60	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
731	13782	26728	17.02	1.0E-60	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1112	14156		2.23	1.0E-60	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1309	14345	27310	2.99	1.0E-60	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1309	14345	27311	2.99	1.0E-60	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1676	14708		1.76	1.0E-60	BE378984.1	EST_HUMAN	601156563F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE3511118 5'
1918	14942	27938	2.77	1.0E-60	11420514	NT	Homo sapiens similar to SALL1 (sal (Drosophila))-like (LOC57167), mRNA
2866	15028	28848	7.85	1.0E-60	6005720	NT	Homo sapiens chromosome 8 open reading frame 2 (C8ORF2), mRNA
3865	16904	29810	0.72	1.0E-60	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
3865	16904	29811	0.72	1.0E-60	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
4453	17479	30367	1.17	1.0E-60	AF167340.1	NT	Homo sapiens soluble interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exons 9 and complete cds, alternatively spliced
5270	18277	31140	1.7	1.0E-60	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
5270	18277	31141	1.7	1.0E-60	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
5758	18851	32031	1.76	1.0E-60	AB014533.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
5936	19022	32216	0.96	1.0E-60	11428910	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
7278	20011	33313	0.87	1.0E-60	U91834.1	NT	Human retina-derived POU-domain factor-1 mRNA, complete cds
7626	20489	33851	0.6	1.0E-60	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7626	20489	33851	0.6	1.0E-60	6006002	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
7834	20876	34266	2.63	1.0E-60	11426768	NT	Homo sapiens breifeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
8173	22139	35586	3.96	1.0E-60	11422088	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
8648	22592		1.08	1.0E-60	AF163894.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
8670	22623	36075	1.38	1.0E-60	11422109	NT	Homo sapiens CG1-15 protein (LOC51006), mRNA
8670	22623	36076	1.38	1.0E-60	11422109	NT	Homo sapiens CG1-15 protein (LOC51006), mRNA
10690	23910	37424	0.53	1.0E-60	X55545.1	NT	H. sapiens cDNA for CREB protein
10690	23910	37425	0.53	1.0E-60	X55545.1	NT	H. sapiens cDNA for CREB protein
11021	23988	37513	2.13	1.0E-60	R25686.1	EST_HUMAN	y844d11.2 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35477 5'
4224	17253	30140	6.09	8.0E-91	D17234.1	EST_HUMAN	HJUM005381 Liver HepG2 cell line, Homo sapiens cDNA clone s381 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8649	21617	35039	4.36	7.0E-01	11418234	NT	Homo sapiens melanin, ring finger protein, 1 (MKRN1), mRNA
10663	23585	37083	0.67	7.0E-01	AB04151.1	EST_HUMAN	CM-ET043-080289-075 BT043 Homo sapiens cDNA
3488	16534	29459	1.71	5.0E-01	AA702794.1	EST_HUMAN	z80504.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4544	17567	30454	1.05	5.0E-01	AU143539.1	EST_HUMAN	AU143539 Y78AA1 Homo sapiens cDNA clone Y78AA1002087 5'
4544	17567	30455	1.05	5.0E-01	AU143539.1	EST_HUMAN	AU143539 Y78AA1 Homo sapiens cDNA clone Y78AA1002087 5'
6770	19825	33108	1.19	5.0E-01		EST_HUMAN	au49f09.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2616121 3' similar to SW:ASPG FLAME Q47898 N4-(BETA-N-ACETYLGLUCOSAMINY)-L-ASPARAGINASE PRECURSOR:
8547	21515	34933	1.65	5.0E-01	BF314882.1	EST_HUMAN	601901624F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130833 5'
9113	22079	35506	1.28	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLC8YF08 3'
9113	22079	35507	1.28	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLC8YF08 3'
12892	25479		2.26	5.0E-01	AI193593.1	EST_HUMAN	qe70H11.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1744365 3' similar to contains MIR.b2 MIR MIR repetitive element;
3215	16270	29182	1.41	4.0E-01	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3215	16270	29183	1.41	4.0E-01	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
11276	24228	37755	3.24	4.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
12377	25159	31811	1.55	4.0E-01	M77894.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCMC80 similar to Retrovirus-related gag polyprotein
12377	25159	31858	1.55	4.0E-01	M77894.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCMC80 similar to Retrovirus-related gag polyprotein
1621	14654	27630	5.97	3.0E-01	11430183	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1621	14654	27631	5.97	3.0E-01	11430183	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3350	16401	28323	1.76	3.0E-01	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3478	16522	29446	3.84	3.0E-01	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3478	16522	29446	3.84	3.0E-01	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3802	16842	29750	1.47	3.0E-01	AF084530.1	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
4821	17642	30530	4.36	3.0E-01	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5016	18030	30915	1.3	3.0E-01	AL163286.2	NT	Homo sapiens chromosome 21 segment HS21C085
5016	18030	30916	1.3	3.0E-01	AL163286.2	NT	Homo sapiens chromosome 21 segment HS21C085
5770	18882	32041	1.43	3.0E-01	11434984	NT	Homo sapiens epidermal secretory protein (19.5Kd) (HE1), mRNA
6437	19503		2.97	3.0E-01	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6735	19791	33071	3.34	3.0E-01	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6735	19791	33072	3.34	3.0E-01	11497811	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
7900	20843	34228	4.07	3.0E-01	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7900	20843	34227	4.07	3.0E-01	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
8278	21247	34659	0.44	3.0E-01	6801589	NT	Homo sapiens enkyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9123	22089	35517	2.51	3.0E-01	D16494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9043	22587	36036	0.8	3.0E-01	AB011186.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
11235	24188	37707	2.53	3.0E-01	AB032179.2	NT	Homo sapiens ERM2 mRNA, complete cds
11536	24477	38028	2.3	3.0E-01	AB029003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
11536	24477	38027	2.3	3.0E-01	AB029003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
12620	25314	31784	1.48	3.0E-01	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12950	18335	31174	3.88	3.0E-01	AF168555.1	NT	Homo sapiens beta-ureidopropionase (BUP-1) gene, exon 8
12950	18335	31175	3.88	3.0E-01	AF168555.1	NT	Homo sapiens beta-ureidopropionase (BUP-1) gene, exon 8
50	13170	28078	2.39	1.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1250	14286	27252	7.11	1.0E-01	AW449748.1	EST_HUMAN	UHH-BIS-elix-d-01-O-J1.a1 NCJ_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2735280 3'
5487	18587	31498	0.73	1.0E-01	11434402	NT	Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA
7020	20146	33484	1.9	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCJ_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4157804 5'
7020	20146	33485	1.9	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCJ_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4157804 5'
8161	21089	34496	0.59	1.0E-01	M20463.1	NT	Human nucleus-encoded mitochondrial aldehyde dehydrogenase 2 (ALDH2) gene, exon 10
1246	14283	27246	6.04	9.0E-02	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
1246	14283	27247	6.04	9.0E-02	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
5538	18635	31576	2.94	9.0E-02	AJ001689.1	NT	Human Na ⁺ /K ⁺ ATPase alpha-subunit mRNA, partial cds
5688	18781	31953	2.18	9.0E-02	J03007.1	NT	Homo sapiens hypothetical protein FLJ20260 (FLJ20260), mRNA
6536	19556	32828	3.86	9.0E-02	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
8190	21160	34569	0.47	9.0E-02	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8190	21160	34570	0.47	9.0E-02	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8717	21685	35112	1.73	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8717	21685	35113	1.73	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9829	22573	36023	1.69	9.0E-02	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
92	13208	28132	3.76	8.0E-02	W28367.1	EST_HUMAN	2682 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
285	13380	28308	4.52	8.0E-02	BE388363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814667 5'
1838	14885	27863	1.06	8.0E-02	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (80kD) (DGKG), mRNA
1838	14885	27864	1.06	8.0E-02	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (80kD) (DGKG), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5140	18149	31028	0.7	8.0E-02	AW157571.1	EST HUMAN	eu83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA IMAGE:2782911 3' similar to
5468	18598	31478	0.84	8.0E-02	AB046820.1	NT	TRC050302 080302 KIAA0555 PROTEIN; contains element MER22 repetitive element;
5678	18672	31835	0.81	8.0E-02	AF264717.1	NT	Homo sapiens mRNA for KIAA1600 protein, partial cds
6887	19754	33031	1.19	8.0E-02	AJ000978.1	NT	Homo sapiens MCP-4 gene
8701	19756	33036	0.79	8.0E-02	AF179428.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
8154	21092	34491	1.16	8.0E-02	AF231025.2	NT	Homo sapiens double FYVE-containing protein 1 mRNA, complete cds
8428	21397	35155	0.58	8.0E-02	11418981	NT	Homo sapiens AIM-1 protein (LOC51161), mRNA
8768	21735	35156	3.52	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8768	21735	35156	3.52	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8868	21836	35258	0.86	8.0E-02	11426569	NT	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA
9417	22382	35820	2.48	8.0E-02	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10388	23308	36786	1.86	8.0E-02	Y13828.1	NT	Homo sapiens mRNA for MENL protein
11156	24114	37840	3.34	8.0E-02	AF074393.1	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
11688	24654	38233	1.72	8.0E-02	4503340	NT	Homo sapiens dihydrodipicamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST) mRNA
27	13147	28046	1.69	7.0E-02	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
238	15836	28262	0.89	7.0E-02	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
238	15836	28263	0.89	7.0E-02	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
593	13660	27283	1.22	7.0E-02	AF007822.1	NT	Homo sapiens cytoplasmic Sepsis truncated isoform mRNA, complete cds
1285	14320	27283	1.14	7.0E-02	4502384	NT	Homo sapiens B-cell CLL lymphoma 7b (BCL7B) mRNA
2197	15212	28230	3.62	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2197	16212	28231	3.62	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2570	16571	28591	1.27	7.0E-02	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
2735	15729	28743	2.98	7.0E-02	6005738	NT	Homo sapiens NRAS-related gene (DTS155E), mRNA
2763	15755	28776	1.31	7.0E-02	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3356	18314	29327	0.97	7.0E-02	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3356	18314	29328	0.97	7.0E-02	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4617	17038	30528	1.44	7.0E-02	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OSC2-R, mRNA, 2880 nt]
4617	17638	30529	1.44	7.0E-02	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OSC2-R, mRNA, 2880 nt]

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5040	18063	30632	0.91	7.0E-02	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5333	18439	31191	6.57	7.0E-02	AA446206.1	EST_HUMAN	z66d12.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781175 5'
1591	14623		1.08	5.0E-02	BE390882.1	EST_HUMAN	601283012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605018 5'
6847	22783		0.42	5.0E-02	W27698.1	EST_HUMAN	38a7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
2778	15768	28788	2.03	3.0E-02	BE908714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902839 5'
5976	18061	32262	4.55	3.0E-02	AA378336.1	EST_HUMAN	EST91020 Synovial sarcoma Homo sapiens cDNA 5' end similar to ribosomal protein S13
11116	24076	37599	5.32	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
11116	24076	37600	5.32	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
28	13148	26047	1.09	2.0E-02	4501898	NT	Homo sapiens actin A receptor, type IIB (ACVR2B) mRNA
180	13280	26205	3.9	2.0E-02	11422846	NT	Homo sapiens hypothetical protein DJ462023.2 (DJ462023.2), mRNA
180	13280	26206	3.9	2.0E-02	11422846	NT	Homo sapiens hypothetical protein DJ462023.2 (DJ462023.2), mRNA
750	13811	26753	1.25	2.0E-02	BE298190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
750	13811	26754	1.25	2.0E-02	BE298190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1727	14757		1.4	2.0E-02	S78653.1	NT	mitg-mes-related [human, Genomic, 2416 nt]
1953	14976	27976	1.73	2.0E-02	A1818119.1	EST_HUMAN	wk27d07.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2419549 3' similar to TR-Q12844
1953	14976	27977	1.73	2.0E-02	A1818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
2064	15082	28101	6.36	2.0E-02	4506880	NT	wk27d07.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2419549 3' similar to TR-Q12844
2668	15685	28684	21.32	2.0E-02	6812457	NT	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
3627	16670	28582	1.17	2.0E-02	AF231919.1	NT	Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4) mRNA
3627	16670	28583	1.17	2.0E-02	AF231919.1	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
3698	16741	29654	5.32	2.0E-02	5803180	NT	Homo sapiens chromosome 21 unknown mRNA
4318	17347	30231	1.4	2.0E-02	M10976.1	NT	Homo sapiens chromosome 21 unknown mRNA
5028	18043		2.37	2.0E-02	ALD40437.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
5853	18944	32129	0.53	2.0E-02	AF016535.1	NT	Homo sapiens chromosome 21 unknown mRNA
6434	19500		13.83	2.0E-02	4504756	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (STIP1), mRNA
6768	19822	33104	2.24	2.0E-02	AB028991.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
7701	20659		0.81	2.0E-02	U67780.1	NT	DKFZp434C0414.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C0414 5'
7730	20659		0.71	2.0E-02	U67780.1	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
9207	22173	35604	1.91	2.0E-02	AW340174.1	EST_HUMAN	Homo sapiens integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL) mRNA
							Homo sapiens NPY Y1-like receptor pseudogene mRNA, complete cds
							Human NPY Y1-like receptor pseudogene mRNA, complete cds
							Human NPY Y1-like receptor pseudogene mRNA, complete cds
							h402h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808371 3' similar to TR-Q02711
							O02711 PRO-POL-OUTPASE POLYPROTEIN ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11112	24072	37694	4.68	2.0E-02	11434800	NT	Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA
11398	24335	37894	4.54	2.0E-02	5803103	NT	Homo sapiens male-specific lethal-3 (Drosophila)-like 1 (MSL3L1), mRNA
12716	25370	31773	3.75	2.0E-02	AB028018.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12883	15685	28684	2.95	2.0E-02	AB028018.1	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1867	14882	27690	1.77	1.0E-02	R76078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:145574 5'
1867	14882	27691	1.77	1.0E-02	R76078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:145574 5'
2087	15104	28122	34.88	1.0E-02	4508688	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1) mRNA
8590	21558	34674	0.77	1.0E-02	BE438625.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
							ig01502.x1 NCI_CGAP_CL1.1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
9519	22482	35927	3.43	1.0E-02	AI380358.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1; contains Alu repetitive element; contains element
							MER17 repetitive element;
9519	22482	35928	3.43	1.0E-02	AI380358.1	EST_HUMAN	ig01502.x1 NCI_CGAP_CL1.1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
2044	15063	28083	2.77	9.0E-03	AU121681.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1; contains Alu repetitive element; contains element
							MER17 repetitive element;
2058	15077		11.43	9.0E-03	AA316723.1	EST_HUMAN	AU121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
							EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2655	15652		1.44	9.0E-03	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3628	16671	29584	1.44	9.0E-03	BE388571.1	EST_HUMAN	601281867F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603832 5'
11959	24838		35.01	9.0E-03	11418528	NT	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
6585	19645	32913	0.52	8.0E-03	AW014042.1	EST_HUMAN	UHH-B10-ash-h-08-0-J1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708371 3'
6585	19645	32914	0.52	8.0E-03	AW014042.1	EST_HUMAN	UHH-B10-ash-h-08-0-J1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708371 3'
6744	19789	33078	3.82	8.0E-03	BF036394.1	EST_HUMAN	601460321F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863908 5'
246	13943	26268	9.15	7.0E-03	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3091	16149	28063	1.56	6.0E-03	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6088	19175	32391	0.56	6.0E-03	11450204	NT	Homo sapiens hypothetical protein FLJ10897 (FLJ10897), mRNA
6088	19175	32392	0.56	6.0E-03	11450204	NT	Homo sapiens hypothetical protein FLJ10897 (FLJ10897), mRNA
6838	19891	33186	0.89	6.0E-03	AB033083.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
7101	20035	33338	1.14	6.0E-03	AF085771.1	NT	Homo sapiens PTH-responsive osteosarcoma B1 protein (B1) mRNA, complete cds
1381	14415	27385	3.77	5.0E-03	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
1406	14439	27408	4.78	5.0E-03	AI874184.1	EST_HUMAN	wc08-08.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2314670 3'
1406	14439	27409	4.78	5.0E-03	AI874184.1	EST_HUMAN	wc08-08.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2314670 3'
1471	14504		1.02	5.0E-03	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C0001

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3247	16302	29228	3.91	5.0E-03	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin
5897	18884	32175	0.9	6.0E-03	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
6230	19304		1.22	5.0E-03	AF045555.1	NT	Homo sapiens wbcx1 (WBCXR1) and wbcx5 (WBCXR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7882	20821	34312	3.32	5.0E-03	AF067193.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
8952	21918	35343	0.56	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8952	21918	35344	0.56	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
9881	22808	36373	2.06	5.0E-03	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10166	23091	36589	1.33	5.0E-03	5032158	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
10430	23352	36836	1.59	5.0E-03	AF069313.2	NT	Homo sapiens WSB1 protein (WSB1) mRNA, complete cds
11174	24131	37681	2.48	5.0E-03	11435599	NT	Homo sapiens nucleobindin 2 (NUCB2) mRNA
12627	25622	31677	2.55	5.0E-03	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
13098	25622	31677	1.32	5.0E-03	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
88	13204		7.06	4.0E-03	AA459933.1	EST_HUMAN	cd50e09.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:786888 3' similar to SW:CLPA_RAT
445	13518	26450	1.25	4.0E-03	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
445	13518	26451	1.25	4.0E-03	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
773	13832	26777	1.38	4.0E-03	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
773	13832	26778	1.38	4.0E-03	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1187	14227	27183	1.62	4.0E-03	8923658	NT	Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA
1804	15015	28022	4.21	4.0E-03	AF047677.1	NT	Homo sapiens dystrophin (DMD) gene, deletion breakpoints 1-3 in Intron 6
2815	15613	28638	1.08	4.0E-03	7656972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
3580	16625	29546	0.84	4.0E-03	7705398	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
4078	17113	30009	2.01	4.0E-03	4504654	NT	Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
5058	18625	28546	0.93	4.0E-03	7705398	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
5727	18821	32001	4.28	4.0E-03	T46894.1	EST_HUMAN	yb94c12.1 Straitsgene liver (#837224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:AA44391 A44391 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN ,
11488	24411	37860	13.22	4.0E-03	AV682051.1	EST_HUMAN	AV682051 GKX Homo sapiens cDNA clone GKCDRF07 5'
3665	16708	28622	9.21	3.0E-03	BF690630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
3665	16708	28623	9.21	3.0E-03	BF690630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
4263	17292		1.23	3.0E-03	AF228896.1	NT	Homo sapiens tensin mRNA, complete cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5881	18970	32161	0.56	3.0E-03	AI553553.1	EST_HUMAN	In28g03.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2169076 3'
5881	18970	32162	0.56	3.0E-03	AI553553.1	EST_HUMAN	In28g03.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2169076 3'
6715	19771	33051	1.65	3.0E-03	11426182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
11152	24112	37637	3.04	3.0E-03	AI824828.1	EST_HUMAN	wb02405.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2304488 3'
192	13283	26219	8.05	2.0E-03	AB015610.1	NT	Chlorococcus aesthiops mRNA for ribosomal protein S4X, complete cds
192	13283	26220	8.05	2.0E-03	AB015610.1	NT	Chlorococcus aesthiops mRNA for ribosomal protein S4X, complete cds
323	13415	26340	12.88	2.0E-03	AL163286.2	NT	Homo sapiens chromosome 21 segment HS21C085
324	13415	26340	8.91	2.0E-03	AL163286.2	NT	Homo sapiens chromosome 21 segment HS21C085
2140	15157	28173	1.15	2.0E-03	U40763.1	NT	Human Cdk-associated RS cyclophilin CARS-Cyp mRNA, complete cds
2494	15497	28523	2.03	2.0E-03	BE252082.1	EST_HUMAN	601117588F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5491	18591	31502	8.04	2.0E-03	AW964395.1	EST_HUMAN	EST378458 MAGC resequences, MAGH Homo sapiens cDNA
5502	18602	31531	0.78	2.0E-03	4758153	NT	Homo sapiens deafness, autosomal dominant 5 (DFNA5), mRNA
5821	18717		0.83	2.0E-03	BF351459.1	EST_HUMAN	QV3-HT0513-200300-126-H04 HT0513 Homo sapiens cDNA
5720	18814	31983	1.08	2.0E-03	11430039	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
5734	18828	32006	0.7	2.0E-03	U74313.1	EST_HUMAN	HSU74313 Human chromosome 14 Homo sapiens cDNA clone 1-86
6941	18894		1.06	2.0E-03	AW502002.1	EST_HUMAN	UI-HF-BNO-ale-g-09-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078329 5'
12520	25251		3.14	2.0E-03	AA126735.1	EST_HUMAN	z29c10.s1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE:3033446 3'
12601	25303		2.69	2.0E-03	L41825.1	NT	Homo sapiens GYP17 gene, 5' end
12853	25461		3.49	2.0E-03	BF035327.1	EST_HUMAN	601495531F1 NIH_MGC_98 Homo sapiens cDNA clone IMAGE:3682086 5'
103	13219	26143	1.82	1.0E-03	AF238987.1	NT	Homo sapiens CTR1 pseudogene
103	13219	26144	1.82	1.0E-03	AF238987.1	NT	Homo sapiens CTR1 pseudogene
519	13580	26510	16.8	1.0E-03	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
602	13688	26583	5.09	1.0E-03	AI146755.1	EST_HUMAN	cy84b08.x1 NCL_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q62384 Q62384
873	13928	26887	4.11	1.0E-03	D87675.1	NT	ZINC FINGER PROTEIN. ;
1241	14277	27237	8.85	1.0E-03	8823270	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1241	14277	27238	8.85	1.0E-03	8823270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
2344	15354	28375	1.27	1.0E-03	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (H-ELO1) mRNA, complete cds
2471	15475	28499	9.52	1.0E-03	AF050068.1	NT	Homo sapiens MHC class 1 region
2833	14334	27298	2.05	1.0E-03	BE287369.1	EST_HUMAN	601177688F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3332665 5'
2833	14334	27297	2.05	1.0E-03	BE287369.1	EST_HUMAN	601177688F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3332665 5'
2945	16003	28828	2.18	1.0E-03	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds

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Table 4
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3229	16284		1.3	1.0E-03	AF231861.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HIELO1) mRNA, complete cds
4480	17488	30373	1.99	1.0E-03	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5646	18742	31807	1.66	1.0E-03	U78508.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5646	18742	31808	1.66	1.0E-03	U78508.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5859	18948	32135	1.02	1.0E-03	AF227198.1	NT	Homo sapiens candidate taste receptor 12R14 gene, complete cds
							Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6022	19105	32308	10.63	1.0E-03	4557792	NT	
6321	19392	32633	0.91	1.0E-03	7862241	NT	Homo sapiens KIAA0872 gene product (KIAA0872), mRNA
6859	20184	33507	2.08	1.0E-03	11431680	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7462	20428	33785	3.07	1.0E-03	D42072.1	NT	Human mRNA for NF-1 N-isoform-exon1, complete cds
8003	21571	34987	1.97	1.0E-03	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
8888	21854	35274	1.12	1.0E-03	Y10183.1	NT	H. sapiens mRNA for MEMD protein
8968	21962	35387	1.29	1.0E-03	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
8378	22344	35776	0.47	1.0E-03	AB072328.1	NT	Homo sapiens mRNA for KIAA1011 protein, partial cds
9379	22344	35776	0.47	1.0E-03	AB072328.1	NT	Homo sapiens mRNA for KIAA1011 protein, partial cds
9807	21130	34533	1.86	1.0E-03	AB072328.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9811	21134	34637	1.04	1.0E-03	AB040918.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9846	22873	36333	4.08	1.0E-03	AF081395.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9946	22873	36334	4.08	1.0E-03	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
10063	23010	36482	0.71	1.0E-03	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10504	23426	36824	0.63	1.0E-03	AL230125.1	NT	Homo sapiens gamma-aminobutyrate receptor 3 (RYR3), mRNA
12763	25405		2.11	1.0E-03	11439646	NT	Homo sapiens GGT1 gene, exon 1
12847	26457		3.14	1.0E-03	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
10856	23876		1.26	8.0E-04	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
3986	17026	29937	2.15	6.0E-04	AF142482.1	NT	Homo sapiens transcription enhancer factor-5 mRNA, complete cds
5441	18543	31454	3.23	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5441	18543	31455	3.23	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
6168	19241	32472	3.06	5.0E-04	AA722434.1	EST_HUMAN	z987908.s1 Soares fetal heart Nbr-FH19W Homo sapiens cDNA clone IMAGE:408604 3'
7206	20230	33562	1.34	5.0E-04	AB015800.1	EST_HUMAN	cd83d05.s1 Soares fetal Nbr-FH19W Homo sapiens cDNA clone IMAGE:408604 3'
8966	21952	35376	0.82	5.0E-04	BF528115.1	EST_HUMAN	602042163F1 NC1 CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4180023 5'
11318	24268	37795	2.81	5.0E-04	11423962	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
11318	24268	37796	2.81	5.0E-04	11423962	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
12497	25965	31318	6.07	5.0E-04	T86398.1	EST_HUMAN	yc88b04.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:116239 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
13048	25588		1.9	5.0E-04	9658724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
1859	14885		9.09	4.0E-04	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
2898	15883	28882	1	4.0E-04	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
4748	17768	30684	2.95	4.0E-04	AI591312.1	EST_HUMAN	hw1110.x1 NCJ_CGAP_Bim52 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q15285 Q15285 PROTEIN TYROSINE PHOSPHATASE;
6812	19670	32847	1.98	4.0E-04	11440870	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6812	19670	32948	1.86	4.0E-04	11440870	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
7037	20031		0.89	4.0E-04	L27388.1	NT	Homo sapiens huntingtin (HTD) gene, exon 37
11782	23937	37458	1.83	4.0E-04	11545782	NT	Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA
613	13678	26594	2.23	3.0E-04	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
722	13784	26718	1.02	3.0E-04	4602508	NT	Homo sapiens complement component 5 (C5) mRNA
1754	14783	27767	1.12	3.0E-04	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1754	14783	27768	1.12	3.0E-04	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1787	14816	27801	4.2	3.0E-04	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
5764	18856	32037	3.32	3.0E-04	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6274	18347	32679	0.99	3.0E-04	AB011536.1	NT	Homo sapiens mRNA for MEGF2, partial cds
6594	18654	32826	4.91	3.0E-04	11526228	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
8088	21024	34423	0.52	3.0E-04	4826883	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
8540	21608	34925	1.03	3.0E-04	AF152309.1	NT	Homo sapiens protocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
8834	21800	35327	4.83	3.0E-04	AB014578.1	NT	Homo sapiens mRNA for KIAA0879 protein, partial cds
8950	22877	36340	4.37	3.0E-04	AF087942.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
11436	24379	37919	3.78	3.0E-04	4757821	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
11887	24884	38460	2.17	3.0E-04	U28711.1	NT	Human cdk-b truncated form 1 lacking leucine zipper mRNA, complete cds
10110	23036	38514	0.68	2.0E-04	AI910393.1	EST_HUMAN	w30h11.x1 NCJ_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2391813 3'
10110	23036	38515	0.68	2.0E-04	AI910393.1	EST_HUMAN	w30h11.x1 NCJ_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2391813 3'
150	13253	26182	2.81	1.0E-04	BE285714.1	EST_HUMAN	601175762F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:3531038 5'
3105	16162	28073	2.24	1.0E-04	BE283433.1	EST_HUMAN	601111686F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3352559 5'
3105	16162	28074	2.24	1.0E-04	BE283433.1	EST_HUMAN	601111686F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3352559 5'
4388	17414	30289	1.18	1.0E-04	9506882	NT	Homo sapiens hypothetical protein (FLJ20748), mRNA
6191	18285	32501	0.95	1.0E-04	AE000269.1	NT	Escherichia coli K-12 MG1655 section 159 of 400 of the complete genome
6397	19465	32711	0.81	1.0E-04	AL040518.1	EST_HUMAN	DKFZp434G0314.T1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G0314 5'
6406	19474	32722	0.77	1.0E-04	H08270.1	EST_HUMAN	y87f02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:45053 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6668	19725	33000	0.56	1.0E-04	AV728992.1	EST_HUMAN	AV728992 HTC Homo sapiens cDNA clone HTC8EF05 5'
8450	21419	34833	0.56	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8450	21419	34834	0.56	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9811	22615	36087	2.57	1.0E-04	11428710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA
10146	23072	36547	1.83	1.0E-04	BE780478.1	EST_HUMAN	601468748F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872099 5'
11405	24349	37881	2.77	1.0E-04	U85590.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds ep22a02.x1 Schaller oligodendrogloma Homo sapiens cDNA clone IMAGE:1956122 3' similar to TR:Q62845
11646	24683	38151	1.94	1.0E-04	AI272244.1	EST_HUMAN	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR ;
12050	24923	38520	3.39	1.0E-04	11418871	NT	Homo sapiens KIAA0164 gene product (KIAA0164), mRNA
12615	13253	26182	1.43	1.0E-04	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
12887	13253	26182	1.31	1.0E-04	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
1473	14508	27480	1.3	9.0E-06	AF027302.1	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABC60) mRNA, complete cds
3170	16225	29140	1.19	9.0E-06	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
3170	16226	29141	1.19	9.0E-06	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5478	18578	31489	1.38	9.0E-06	X82569.1	NT	M.musculus gyt1 gene (exons 1c and 2)
5479	18579	31490	1.38	9.0E-06	X82569.1	NT	M.musculus gyt1 gene (exons 1c and 2)
8596	21563	34977	1.61	9.0E-06	AF274763.1	NT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
4597	17590	30482	1.82	8.0E-06	AI700698.1	EST_HUMAN	we08a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340608 3' similar to gb:K00568 TUBULIN ALPHA-1 CHAIN (HUMAN);
4597	17590	30483	1.82	8.0E-06	AI700698.1	EST_HUMAN	we08a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340608 3' similar to gb:K00568 TUBULIN ALPHA-1 CHAIN (HUMAN);
7136	20112	33425	0.83	8.0E-06	11416378	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
7452	20418	33773	1.55	8.0E-06	11426528	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
7452	20418	33774	1.55	8.0E-06	11426528	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
8539	21507	34924	2.02	8.0E-06	AF032897.1	NT	Homo sapiens potassium channel subunit (HIERG-3) mRNA, complete cds
9720	22748	36199	1.97	8.0E-06	11420844	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
9720	22748	36200	1.97	8.0E-06	11420844	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
10207	23132	36819	2.67	8.0E-06	6174844	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
10238	23163	37008	3.08	8.0E-06	AB037818.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
10595	23517	37008	0.8	8.0E-06	9845623	NT	Homo sapiens early growth response 2 (Krac-20 (Drosophila) homolog) (EGR2), mRNA
11813	24688	38279	2.21	8.0E-06	10864024	NT	Homo sapiens HGF-binding transcription factor Zhangfei (ZF), mRNA
12820	25442		28.02	8.0E-06	AA628066.1	EST_HUMAN	zu84b01.at Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744849 3' similar to contains L1.H1.L1 repetitive element ;

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275	13371	28298	6.59	7.0E-05	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
275	13371	28299	6.59	7.0E-05	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4394	17422	30307	4.55	7.0E-05	M95708.1	NT	Homo sapiens Ly-8-like protein (CD59) mRNA, complete cds
4443	17489		1.26	7.0E-05	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21CD46
5090	18100	30976	1	7.0E-05	M95929.1	NT	Human homeobox protein (PHOX1) mRNA, 3' end
9572	22534	35985	0.82	4.0E-05	BE439625.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
12013	24890	38487	1.93	4.0E-05	AW950334.1	EST_HUMAN	EST382704 MAGC resequences, MAGA Homo sapiens cDNA
12013	24890	38488	1.93	4.0E-05	AW950334.1	EST_HUMAN	EST382704 MAGC resequences, MAGA Homo sapiens cDNA
12055	24938	38634	1.79	4.0E-05	BF371302.1	EST_HUMAN	RC8-FN0114-090800-011-B07 FN0114 Homo sapiens cDNA
6517	18817	31550	1.61	3.0E-05	BF528041.1	EST_HUMAN	602071148F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4214147 5'
5757	25644	32030	0.54	3.0E-05	4503354	NT	Homo sapiens dedicator of cyto-kinesis 1 (DOCK1) mRNA
7563	20554	33913	1	3.0E-05	AW958121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
7563	20554	33914	1	3.0E-05	AW958121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
9710	22683	36119	1.75	3.0E-05	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9710	22683	36120	1.75	3.0E-05	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
10104	23030	36508	0.69	3.0E-05	BF213446.1	EST_HUMAN	601845212F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4070451 5'
1651	14683	27658	2.18	2.0E-05	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1651	14683	27657	2.18	2.0E-05	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
							Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
1958	14680	27682	2.13	2.0E-05	4507512	NT	mRNA
1961	14683	27688	1.36	2.0E-05	BE363873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658862 5'
2433	15440	28457	1.43	2.0E-05	5453666	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2433	15440	28458	1.43	2.0E-05	5453666	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2473	15477	28500	3.35	2.0E-05	AF240788.1	NT	Homo sapiens glycine cleavage system protein H (aminoethyl carrier) (GCSH) mRNA
2620	15628	28545	1.2	2.0E-05	4759423	NT	Homo sapiens Usurpin-gamma mRNA, complete cds
3171	16226	29142	2.48	2.0E-05	AF015462.1	NT	Homo sapiens uniconventional myosin-15 (LOC51168), mRNA
3577	16622	29542	2.93	2.0E-05	7705900	NT	Homo sapiens uniconventional myosin-15 (LOC51168), mRNA
3577	16622	29543	2.93	2.0E-05	7705900	NT	Homo sapiens uniconventional myosin-15 (LOC51168), mRNA
3631	16674	29557	0.93	2.0E-05	AB037807.1	NT	Homo sapiens mRNA for KIAA1398 protein, partial cds
							qin01c02.x1 Soares_NIH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1890546 3' similar to WP:123G7.4 CE03705 :
3763	16905	29716	1.09	2.0E-05	AI280284.1	EST_HUMAN	Homo sapiens hypothetical protein (HS322B1A), mRNA
4388	17416	30300	1.69	2.0E-05	7667185	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5077	18087	30957	2.92	2.0E-05	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
5557	18654	31598	4.36	2.0E-06	7705784	NT	Homo sapiens CGI-48 protein (LOC51086), mRNA
5557	18654	31599	4.36	2.0E-06	7705784	NT	Homo sapiens CGI-48 protein (LOC51086), mRNA
5782	18874	32055	1.22	2.0E-06	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5782	18874	32056	1.22	2.0E-06	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5827	18917	32101	0.87	2.0E-06	11525993	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGLJK p55 subfamily member 3) (MPP3), mRNA
6265	18338	32571	3.71	2.0E-06	M59724.1	NT	Human muscle-type phosphofructokinase (PFK-M) gene, exon 7
6592	18652	32923	1.01	2.0E-06	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6592	18652	32924	1.01	2.0E-06	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6722	19778	33057	2.39	2.0E-06	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9), mRNA, complete cds
6828	20152	33471	1.37	2.0E-06	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
8498	22462	35603	2.51	2.0E-06	11421785	NT	Homo sapiens ribophorin II (RPN2), mRNA
10747	23689	37168	0.54	2.0E-06	11434330	NT	Homo sapiens KIAA1065 protein (KIAA1065), mRNA
11078	24040	37564	1.72	2.0E-06	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRIA), mRNA
12011	24888	38484	2.35	2.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12011	24888	38485	2.35	2.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12587	25291	31782	2.69	2.0E-06	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12884	25546	31718	5.81	2.0E-06	11418164	NT	Homo sapiens acyl-CoA oxidase (ADSL), mRNA
5696	18791	31882	7.21	1.0E-06	AA284851.1	EST_HUMAN	z23h04.r1 Soares ovary tumor NIH/OT Homo sapiens cDNA clone IMAGE:714007 5' similar to
5696	18791	31883	7.21	1.0E-06	AA284851.1	EST_HUMAN	z23h04.r1 Soares ovary tumor NIH/OT Homo sapiens cDNA clone IMAGE:714007 5' similar to
7757	20710	34079	4.21	1.0E-06	BF370000.1	EST_HUMAN	TR:G1067084 G1067084 F58H2.6
7757	20710	34080	4.21	1.0E-06	BF370000.1	EST_HUMAN	z23h04.r1 Soares ovary tumor NIH/OT Homo sapiens cDNA clone IMAGE:714007 5' similar to
8536	21504	34922	1.58	9.0E-06	BE987289.1	EST_HUMAN	TR:G1067084 G1067084 F58H2.6
442	18940	26447	1.36	8.0E-06	BE907607.1	EST_HUMAN	TR:G1067084 G1067084 F58H2.6
442	18940	26448	1.36	8.0E-06	BE907607.1	EST_HUMAN	TR:G1067084 G1067084 F58H2.6
5589	18885	26448	2.28	8.0E-06	AW836047.1	EST_HUMAN	TR:G1067084 G1067084 F58H2.6
3929	16969	26882	1.06	7.0E-06	AF231620.1	NT	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
3329	16380	26301	0.84	6.0E-06	AL163201.2	NT	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
3494	16541	26465	15.12	6.0E-06	M26873.1	NT	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
5722	18816	31885	0.82	6.0E-06	11422842	NT	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11872	24754	38335	2.59	6.0E-06	7882289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11872	24754	38336	2.59	6.0E-06	7882289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11918	24789	38390	2.78	6.0E-06	8823839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
320	13412	28336	3.08	5.0E-06	AB032898.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
843	13888	28855	3.47	5.0E-06	AB032898.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
843	13888	28856	3.47	5.0E-06	AB032898.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
2826	16025		1.23	5.0E-06	11416797	NT	Homo sapiens phosphodiesterase 8A, cGMP-specific, rod, alpha (PDE8A), mRNA
3039	16097	29013	0.71	5.0E-06	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
4940	17958		0.83	5.0E-06	X80812.1	NT	H. sapiens DNA for monamine oxidase type A (7) (partial)
5233	18241	31113	0.93	5.0E-06	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
6807	18861	33148	1.15	5.0E-06	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6870	18823	33219	0.5	5.0E-06	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
6949	20173	33498	4.02	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6949	20173	39497	4.02	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
7219	20241	33578	0.78	5.0E-06	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7758	20711	34081	0.7	5.0E-06	AB024334.1	NT	Homo sapiens mRNA for 14-3-3gamma, complete cds
8443	21412	34825	6.11	5.0E-06	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
8443	21412	34826	6.11	5.0E-06	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
12078	24948	38543	1.51	5.0E-06	7861973	NT	Homo sapiens KIAA0175 gene product (KIAA0175), mRNA
4219	17248		7.1	3.0E-06	H68658.1	EST_HUMAN	yf67h12.1 Scree fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212327 5'
415	13488		4.65	2.0E-06	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
748	13809	28750	1.12	2.0E-06	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21G048
4790	17808	30700	1.39	2.0E-06	BE148074.1	EST_HUMAN	RCS-HT0230-040500-110-g02 HT0230 Homo sapiens cDNA
7898	20854	34017	0.98	2.0E-06	BF368731.1	EST_HUMAN	QV4-GN0120-250800-427-512 GN0120 Homo sapiens cDNA
7898	20854	34018	0.98	2.0E-06	BF368731.1	EST_HUMAN	QV4-GN0120-250800-427-512 GN0120 Homo sapiens cDNA
8932	22297		6.83	2.0E-06	AV689461.1	EST_HUMAN	AV689461 GK Homo sapiens cDNA clone GKGRMD07 5'
12285	25102		3.08	2.0E-06	AW249440.1	EST_HUMAN	2818351.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2818351 5'
872	13738	28663	2.47	1.0E-06	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1798	14825	27809	2.35	1.0E-06	AW955054.1	EST_HUMAN	EST367124 IMAGE resequences, MAGC Homo sapiens cDNA
1798	14825	27810	2.35	1.0E-06	AW955054.1	EST_HUMAN	EST367124 IMAGE resequences, MAGC Homo sapiens cDNA
2237	15251	28274	1.04	1.0E-06	MT75987.1	NT	Human hepatocyte growth factor gene, exon 1
2237	15251	28276	1.04	1.0E-06	MT75987.1	NT	Human hepatocyte growth factor gene, exon 1
7188	18380	31234	1.15	1.0E-06	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7250	18985	33283	0.55	1.0E-08	6012456	NT	Homo sapiens guanine nucleotide exchange factor for Rap1 (KIAA0277), mRNA
8555	21523	34941	1.35	1.0E-06	7651803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8555	21523	34942	1.36	1.0E-08	7651803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8668	22032	35455	24.51	1.0E-08	11419428	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
8202	22168	35598	2.21	1.0E-08	AF274883.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10520	23442	36939	0.91	1.0E-08	AB033116.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
10520	23442	36940	0.91	1.0E-08	AB033116.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
12272	18332	31169	1.59	1.0E-08	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
12272	18332	31170	1.59	1.0E-08	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
3338	16389	28310	0.95	6.0E-07	BF245240.1	EST_HUMAN	601863712F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4081202 5'
7806	20756	35982	3.82	6.0E-07	BE141849.1	EST_HUMAN	IL5-HT0117-011089-004-D07 HT0117 Homo sapiens cDNA
8286	22562	35982	0.85	6.0E-07	BE898012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
8286	22562	35983	0.85	6.0E-07	BE898012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
10959	23879	37391	0.71	6.0E-07	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
10959	23879	37392	0.71	6.0E-07	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
11734	24620	38198	3.43	6.0E-07	X15804.1	NT	Human mRNA for alpha-actinin
8348	21317	34732	2.27	5.0E-07	ALD43314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
8482	21450	34868	13.95	5.0E-07	AA418026.1	EST_HUMAN	z497e12.s1 Scores_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:767758 3' similar to TR-G1304125
10034	22881	36428	2.61	5.0E-07	BF154912.1	EST_HUMAN	G1304125 PMS4 MRNA ;
11873	24765	38337	1.75	5.0E-07	BE148597.1	EST_HUMAN	RCO-BT0812-250900-032-e09 BT0812 Homo sapiens cDNA
11873	24765	38338	1.75	5.0E-07	BE148597.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
938	13891	28943	2.4	4.0E-07	BE004436.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
948	14001	28953	1.87	4.0E-07	AB030176.1	NT	CMD-BN0108-170300-283-e08 BN0108 Homo sapiens cDNA
948	14001	28954	1.87	4.0E-07	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
1925	14949	27945	0.99	4.0E-07	5453572	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
5845	18741	31806	0.86	4.0E-07	4567328	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
5956	19041	32239	0.52	4.0E-07	U09002.1	NT	Homo sapiens apolipoprotein H (beta-2-glycoprotein I) (APOH) mRNA
5956	19041	32240	0.52	4.0E-07	U09002.1	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (hNR2A) mRNA, complete cds
6997	20123	33437	5.9	4.0E-07	Y11339.2	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (hNR2A) mRNA, complete cds
6997	20123	33438	5.9	4.0E-07	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
7217	20239	33573	1.35	4.0E-07	7710125	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
							Homo sapiens ligase III, DNA, ATP-dependent (LIG3), transcript variant alpha, mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7270	20005	33305	0.94	4.0E-07	11422155	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CF-TR), mRNA
8474	21443	34860	0.88	4.0E-07	4557708	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2) mRNA
8701	21689	35082	1.82	4.0E-07	11421793	NT	Homo sapiens v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
8828	21802	35320	0.49	4.0E-07	11431080	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
8957	21833	35358	0.78	4.0E-07	11423233	NT	Homo sapiens cytochrome P450, subfamily IVB, polypeptide 1 (CYP4B1), mRNA
9603	22607	36056	1.36	4.0E-07	AB011168.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
9603	22607	36057	1.36	4.0E-07	AB011168.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
10803	23724	37226	0.79	4.0E-07	11431080	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
11496	24441	37881	2.15	4.0E-07	11883122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11498	24441	37882	2.15	4.0E-07	11883122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
12467	25216	39268	7.99	4.0E-07	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
243	13341	26268	1.01	3.0E-07	AB032888.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
876	13931	26889	2.71	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant-II, Alzheimer disease) (APP), mRNA
875	13931	26890	2.71	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant-II, Alzheimer disease) (APP), mRNA
1436	15968	27446	1.72	3.0E-07	4758813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2445	15925	28470	1.57	3.0E-07	U38255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3185	16240	29158	2.22	3.0E-07	K02212.1	NT	Human alpha-1-antitrypsin gene (S variant), complete cds
3274	16328	29249	1.01	3.0E-07	5174478	NT	Homo sapiens perlecanin (PCNT) mRNA
4815	17832	30730	18.16	1.0E-07	4503470	NT	Homo sapiens alpha 1 (EEF1A1) mRNA
6567	19827	32892	2.5	1.0E-07	BE568488.1	EST_HUMAN	601339520F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3681821 5'
9789	21122	34525	0.51	1.0E-07	AW379876.1	EST_HUMAN	RC0-HT0268-211169-011-g05 HT0268 Homo sapiens cDNA
9789	21122	34526	0.51	1.0E-07	AW379876.1	EST_HUMAN	RC0-HT0268-211169-011-g05 HT0268 Homo sapiens cDNA
10122	23048	36527	1.46	1.0E-07	R10887.1	EST_HUMAN	Y38c08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128134 3'
11082	24025	37549	3.07	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11082	24025	37550	3.07	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11639	24576	38142	1.67	1.0E-07	AA563781.1	EST_HUMAN	nt29022.s1 NC1_CGAP_Co11 Homo sapiens cDNA clone IMAGE:1014952 3'
11798	23951	37472	35.69	1.0E-07	11428272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
11798	23951	37473	35.69	1.0E-07	11428272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
902	13957	26914	1.43	9.0E-08	BE080873.1	EST_HUMAN	PM4-BT0724-010400-008-012 BT0724 Homo sapiens cDNA
1281	14316	27278	2.02	9.0E-08	8393082	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
8435	19501		0.63	9.0E-08	AJ250713.1	NT	Homo sapiens CLDN12 gene for claudin-12

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7507	20472	33832	0.55	9.0E-08	7681871	NT	Homo sapiens leucyl-tRNA synthetase, mitochondrial (KIAA0028), mRNA
7617	20577	33940	0.58	9.0E-08	11418408	NT	Homo sapiens A kinase (PRKA) anchor protein (ytliac) 9 (AKAP9), mRNA
8257	21228	34836	5.5	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
8257	21228	34837	5.5	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
9471	22435	35873	2.01	9.0E-08	X08888.1	NT	Human mRNA for amyloid A4(751) protein
9579	22541	35991	1.44	9.0E-08	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
9647	22591	36040	1.49	9.0E-08	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
9694	22647		0.83	9.0E-08	AF057726.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exon 8
9722	22750	36202	1.18	9.0E-08	4507070	NT	Homo sapiens SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
9722	22750	36203	1.18	9.0E-08	4507070	NT	Homo sapiens SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
10623	23545	37045	0.5	9.0E-08	AF141325.2	NT	Homo sapiens inositol polyphosphate 1-phosphatase (INPP1) gene, complete cds
11346	24286	37623	2.08	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11346	24286	37624	2.08	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11407	24351	37883	1.75	9.0E-08	11418982	NT	Homo sapiens mitogen-activated protein kinase kinase 7 (MAP3K7), mRNA
26	13146		2.24	8.0E-08	AJ251153.1	NT	Homo sapiens partial MICB gene for MHC class I chain-related protein B, exons 2-3 and joined CDS
1562	14594	27568	1.49	8.0E-08	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1562	14594	27569	1.49	8.0E-08	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1739	14769	27764	2.73	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1739	14769	27765	2.73	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3607	16952	28569	0.97	8.0E-08	AJ23041.1	NT	Homo sapiens 950 kb contig between AML1 and CBR1 on chromosome 21q22, segment 1/3
3607	16952	28570	0.97	8.0E-08	AJ23041.1	NT	Homo sapiens 950 kb contig between AML1 and CBR1 on chromosome 21q22, segment 1/3
3809	16949	29757	6.45	8.0E-08	J04468.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
6201	19276	32509	2.74	5.0E-08	BE885873.1	EST_HUMAN	601507503F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909097 5'
2188	16203	28223	1.23	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
2618	15814	28839	1.19	3.0E-08	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2759	15751		3.63	3.0E-08	AA077498.1	EST_HUMAN	7B18-H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18-H01
7131	20107	33418	0.7	3.0E-08	8986846	NT	Homo sapiens chromosome 12 open reading frame 4 (C12ORF4), mRNA
7134	20110	33422	1.63	3.0E-08	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7134	20110	33423	1.63	3.0E-08	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
9104	22070	35498	3.59	3.0E-08	H46898.1	EST_HUMAN	y017g09.1 Soares adult brain N25-61B55Y Homo sapiens cDNA clone IMAGE:178240 5'
9652	22585	36043	0.65	3.0E-08	8922088	NT	Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10243	23108	36856	1.61	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124.3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone l8
10243	23108	36856	1.61	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124.3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone l8
10839	23759	37259	0.88	3.0E-08	BE900454.1	EST_HUMAN	601673886F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3955517 5'
11289	24249	37775	2.09	3.0E-08	U69309.1	NT	Human fumerase precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
12851	25835		1.4	3.0E-08	BE382519.1	EST_HUMAN	601287855F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628213 5'
18039	25581		2.4	3.0E-08	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
737	13798	26737	0.94	2.0E-08	BE261694.1	EST_HUMAN	601149488F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502245 5'
2082	15108	26128	3.36	2.0E-08	BE294281.1	EST_HUMAN	601172558F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528134 5'
2247	15261	28288	1.49	2.0E-08	AL163202.2	NT	Homo sapiens chromosome 21 segment HS210002
4325	17354	30240	0.75	2.0E-08	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4368	17395	30274	2.9	2.0E-08	4758331	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4864	17881	30767	1.22	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRN) gene, exon 18
4884	17881	30768	1.22	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRN) gene, exon 18
5450	18552	31484	4.26	2.0E-08	7705512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6811	19855	33153	1.09	2.0E-08	4505798	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
7885	20829	34208	1.08	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
7885	20829	34207	1.08	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
8955	21921	35347	3.8	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8955	21921	35348	3.8	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
9039	22005	35425	0.57	2.0E-08	L78668.1	NT	Homo sapiens NKAT4b mRNA, complete cds
9039	22005	35426	0.57	2.0E-08	L78668.1	NT	Homo sapiens NKAT4b mRNA, complete cds
9095	22848	36305	2.7	2.0E-08	X12684.1	NT	H sapiens arginase gene exon 3 (EC 3.5.3.1)
10778	23698		1.26	2.0E-08	7705968	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
11942	24822	38418	1.58	2.0E-08	AF273048.1	NT	Homo sapiens GTCL tumor antigen s820-9 mRNA, complete cds
405	13478	26413	23.04	1.0E-08	AI862007.1	EST_HUMAN	W68604.x1 NC1 CGAP_UH1 Homo sapiens cDNA clone IMAGE:2261743 3' similar to SW:FL2B_HUMAN
455	13528	28458	2.12	1.0E-08	AW688611.1	EST_HUMAN	P28316 60S RIBOSOMAL PROTEIN L23A. ;
							P1M0-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
1813	14840	27831	13.58	1.0E-08	N49818.1	EST_HUMAN	Y023105.L1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:2435585 5' similar to
5390	18493	31370	3.54	1.0E-08	AA108554.1	EST_HUMAN	P1R-S54204 S54204 ribosomal protein L29 - human ;
5849	18745	31812	1.07	1.0E-08	BE390627.1	EST_HUMAN	z988-c09.L1 Straigene musclic 837209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:G806562
5849	18745	31812	1.07	1.0E-08	BE390627.1	EST_HUMAN	G806562 NEBULIN. ;
5849	18745	31913	1.07	1.0E-08	BE390627.1	EST_HUMAN	601284986F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606892 5'
5849	18745	31913	1.07	1.0E-08	BE390627.1	EST_HUMAN	601284986F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606892 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8850	22315	35740	5.28	1.0E-08	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
8850	22315	35741	5.28	1.0E-08	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
5917	19003	32195	0.84	9.0E-09	A1905004.1	EST_HUMAN	QV-BT073-191288-012 BT073 Homo sapiens cDNA
5917	19003	32198	0.84	9.0E-09	A1905004.1	EST_HUMAN	QV-BT073-191288-012 BT073 Homo sapiens cDNA
6158	19233	32465	3.77	9.0E-09	AW968635.1	EST_HUMAN	EST3807111 MAGE resequences, MAGJ Homo sapiens cDNA
11458	24399	37946	3.71	9.0E-09	A1479829.1	EST_HUMAN	tn68h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW-BID_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST;
11458	24399	37947	3.71	9.0E-09	A1479829.1	EST_HUMAN	tn68h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW-BID_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST;
11460	24403	37951	2.19	9.0E-09	BF359678.1	EST_HUMAN	PM2-MT0037-250700-003-G04 MT0037 Homo sapiens cDNA
11743	24628	38207	1.84	9.0E-09	AA134604.1	EST_HUMAN	zn80d02.l1 Stratagene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565443 5' similar to TR:G862894 G862894 GPI-ANCHORED PROTEIN P137.;
9078	22044	35467	1.18	8.0E-09	B635487	NT	Human endogenous retrovirus, complete genome
5933	19019	32214	8.72	7.0E-09	AF035808.1	NT	Homo sapiens oscillin (tLn) gene, exon 5
11933	24814	38410	1.98	7.0E-09	AF001886.1	NT	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
472	13544	28473	0.84	6.0E-09	U10991.1	NT	Human G2 protein mRNA, partial cds
4779	17798	30980	0.97	6.0E-09	4502680	NT	Homo sapiens GD34 antigen (CD34) mRNA
6752	19806	33087	0.96	6.0E-09	7706136	NT	Homo sapiens GAP-like protein (LOC51306), mRNA
6835	19888	33182	0.81	6.0E-09	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
6835	19888	33183	0.81	6.0E-09	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8441	21410	34823	1.08	6.0E-09	X99101.1	NT	H.sapiens mRNA for estrogen receptor
8460	21429	34846	0.62	6.0E-09	6601589	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9117	22083	35511	2.24	6.0E-09	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deoxyase/N-sulfotransferase 4, complete cds
9215	22181	35612	3.79	6.0E-09	AF080255.1	NT	Homo sapiens lodestar protein mRNA, complete cds
9215	22181	35613	3.79	6.0E-09	AF080255.1	NT	Homo sapiens lodestar protein mRNA, complete cds
9275	22241	35669	0.64	6.0E-09	11431994	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 1 (ITPR1), mRNA
9275	22241	35670	0.64	6.0E-09	11431994	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 1 (ITPR1), mRNA
11074	24038	37560	3.32	6.0E-09	11526299	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
11783	23938	37459	1.98	6.0E-09	8910278	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA
11783	23938	37460	1.98	6.0E-09	8910278	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA
1982	15003	28008	1.37	5.0E-09	Y11385.1	NT	H.sapiens IMPA gene, exon 8
4596	17617	30511	1.46	5.0E-09	AF009660.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
12496	25238		5.2	5.0E-09	BE890177.1	EST_HUMAN	60151315/F1.NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914391 5'
8684	21632		5.74	3.0E-09	M95586.1	NT	Human E2A/HLA fusion protein (E2A/HLF) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1244	14261		16.34	2.0E-09	AW274782.1	EST_HUMAN	xp00606.x1 NCL_CGAP_HN0 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb-M31212 MYOSIN LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN);
3272	16326	29248	1.19	2.0E-09	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4574	17598	30480	1.95	2.0E-09	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7936	20878	34268	0.67	2.0E-09	AF267737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
9055	22021	35446	12.17	2.0E-09	W23507.1	EST_HUMAN	zb46d08.r1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:306835 5' similar to gb-M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
9507	22470	35914	0.65	2.0E-09	R78254.1	EST_HUMAN	y61b08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145925 5'
11440	24383	37823	2.66	2.0E-09	AF247457.2	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
315	13407	26333	1.5	1.0E-09	AF114487.1	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
379	13463	26393	1.04	1.0E-09	11628150	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GBPA), mRNA
1419	14462	27428	1.98	1.0E-09	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1559	14591	27563	1.82	1.0E-09	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1559	14591	27564	1.52	1.0E-09	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1944	14968	27866	1.18	1.0E-09	4503730	NT	Homo sapiens FK506-binding protein 6 (394D) (FKBP6) mRNA, and translated products
1944	14968	27866	1.18	1.0E-09	4503730	NT	Homo sapiens FK506-binding protein 6 (394D) (FKBP6) mRNA, and translated products
3101	16158	28070	1.6	1.0E-09	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
4407	17435	30320	2.26	1.0E-09	AF098018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
4407	17435	30321	2.26	1.0E-09	AF098018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
5636	18926	32110	0.89	1.0E-09	7862349	NT	Homo sapiens cell recognition molecule Casor2 (KJAA0868), mRNA
6976	20199	33528	1.77	1.0E-09	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
6976	20199	33529	1.77	1.0E-09	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
7346	25680	33662	0.61	1.0E-09	X98022.1	NT	H. sapiens E6-AP gene exon 2
9554	22516		0.86	1.0E-09	11419721	NT	Homo sapiens ALEX1 protein (LOC351309), mRNA
9878	22831	36285	1.99	1.0E-09	AW940174.1	EST_HUMAN	hd02h02.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808371 3' similar to TR-002711
11473	24416	37865	1.89	1.0E-09	7427514	NT	O02711 PRO-POL-DUTPASE POLYPROTEIN;
11473	24416	37866	1.89	1.0E-09	7427514	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA
11705	24670	38247	2.17	1.0E-09	AB023222.1	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA
12253	25079		0.99	1.0E-09	AF240786.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
1	13123	26021	1.83	1.0E-100	AL163247.2	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2	13123	26021	1.19	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
						NT	Homo sapiens chromosome 21 segment HS21C047

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
69	13187	28105	1.3	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
69	13187	28106	1.3	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
87	13203	28128	0.87	1.0E-100	AW275237.1	EST_HUMAN	xv78b11.x1 NCL CGAP_Bim53 Homo sapiens cDNA clone IMAGE:2824605 3'
170	13272	28197	2.52	1.0E-100	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
317	13408	28335	0.86	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
343	13432	28354	2.53	1.0E-100	T05087.1	EST_HUMAN	EST02975 Fetal brain, Striatum (cat9336206) Homo sapiens cDNA clone HFBRCR32
437	13511		2.36	1.0E-100	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
480	13563		4.8	1.0E-100	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
510	13581	28502	1.4	1.0E-100	BE180609.1	EST_HUMAN	RC3-H170625-040500-022-b09 HT0625 Homo sapiens cDNA
1021	14067	27017	4.33	1.0E-100	7881685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1021	14067	27018	4.33	1.0E-100	7881685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1549	14582		1.23	1.0E-100	AW207655.1	EST_HUMAN	UH-B11-afk-c-07-0-J1.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722184 3'
1554	14588	27558	1.49	1.0E-100	AI200857.1	EST_HUMAN	qf82009.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
1881	14808	27806	0.98	1.0E-100	AB032894.1	NT	P81061 CYSTATIN ;
2254	15288		1.25	1.0E-100	D83348.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2717	15711	28728	1.98	1.0E-100	D11078.1	NT	Rat mRNA for short type PB-cadherin, complete cds
3031	16089		3.1	1.0E-100	AF057354.1	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
4238	17287	30154	1.46	1.0E-100	AF057354.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
4294	17293	30172	1.94	1.0E-100	4503782	NT	Homo sapiens myotubularin-related protein 1a mRNA, partial cds
5127	18136	31012	3.58	1.0E-100	5032104	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5127	18136	31013	3.58	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5362	18467	31338	1.71	1.0E-100	BF244218.1	EST_HUMAN	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5558	18682	31850	0.66	1.0E-100	AW075983.1	EST_HUMAN	601883184F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4080899 5'
5785	18877	32059	1.5	1.0E-100	AU118182.1	EST_HUMAN	xa8201.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2573305 3' similar to gb:U12433
5839	18929	32113	1.29	1.0E-100	AF195116.1	NT	PROTEIN PHPS1-2 (HUMAN);
5937	19023	32217	0.9	1.0E-100	X14690.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003046 5'
6287	19359	32595	0.89	1.0E-100	4557568	NT	Homo sapiens NF-E2-related factor 3 gene, complete cds
6287	19359	32596	0.89	1.0E-100	4557568	NT	Human mRNA for plasma inter-alpha-trypsin inhibitor heavy chain H(3)
6576	19638		1.1	1.0E-100	5728667	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6845	19703	32979	4.85	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6704	19760	33039	0.61	1.0E-100	AU138800.1	EST_HUMAN	Homo sapiens hsd domain and RLD 2 (HERC2), mRNA
							AU140214 PLACE2 Homo sapiens cDNA clone PLACE2000137 5'
							AU138800 PLACE1 Homo sapiens cDNA clone PLACE1005089 5'

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6843	19898	33190	1.36	1.0E-100	R10887.1	EST_HUMAN	yf38c08.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:129134 3'
6834	20198	33478	1.08	1.0E-100	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7019	20145	33462	0.98	1.0E-100	AA49841.1	EST_HUMAN	ae33b08.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
7019	20145	33463	0.98	1.0E-100	AA49841.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
7070	20092	33401	1.12	1.0E-100	BF376478.1	EST_HUMAN	ae33b08.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
7070	20092	33402	1.12	1.0E-100	BF376478.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
7078	20098	33410	6.82	1.0E-100	X04571.1	NT	ae33b08.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
7980	20928	34323	0.52	1.0E-100	U63139.1	NT	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
7980	20928	34324	0.52	1.0E-100	U63139.1	NT	ae33b08.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
8877	21844	35288	11.86	1.0E-100	BF103853.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
8914	21880	35763	5.3	1.0E-100	AL163203.2	NT	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
9368	22333	35763	0.59	1.0E-100	AU116951.1	EST_HUMAN	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
9368	22333	35764	0.59	1.0E-100	AU116951.1	EST_HUMAN	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
9588	22550	36001	3.34	1.0E-100	AB040918.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
9665	22822		2.44	1.0E-100	A1972388.1	EST_HUMAN	Homo sapiens Rad50 (Rad50) mRNA, complete cds
9788	21111	34511	2.04	1.0E-100	AW898811.1	EST_HUMAN	Homo sapiens Rad50 (Rad50) mRNA, complete cds
9842	22778		1.06	1.0E-100	AU127720.1	EST_HUMAN	Homo sapiens Rad50 (Rad50) mRNA, complete cds
9842	22869	36331	2.29	1.0E-100	AB046846.1	NT	601647357F1 NIH_MGC 61 Homo sapiens cDNA clone IMAGE:3931310 5'
9842	22869	36332	2.29	1.0E-100	AB046846.1	NT	Homo sapiens chromosome 21 segment HS21C003
10203	23128	36614	1.47	1.0E-100	AB046846.1	EST_HUMAN	AU116951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
10203	23128	36615	1.47	1.0E-100	AW630487.1	EST_HUMAN	AU116951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
10364	23287	36784	0.46	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1485 protein, partial cds
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	wt37g09.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2489820 3' similar to contig element
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	MER22 repetitive element ;
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	AU127720 NT2RP2 Homo sapiens cDNA clone NT2RP2001918 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	AU127720 NT2RP2 Homo sapiens cDNA clone NT2RP2001918 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	Homo sapiens mRNA for KIAA1628 protein, partial cds
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	Homo sapiens mRNA for KIAA1628 protein, partial cds
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	hh83c11.y1 NCI_CGAP_GUT1 Homo sapiens cDNA clone IMAGE:2969398 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	hh83c11.y1 NCI_CGAP_GUT1 Homo sapiens cDNA clone IMAGE:2969398 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	AV732101 HTF Homo sapiens cDNA clone HTFBIG01 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	602020554F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156185 5'
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	Human endogenous retrovirus HERV-K, pol gene
10836	23756	37256	1.94	1.0E-100	BF347619.1	EST_HUMAN	MRO-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
11111	24071	37593	7.51	1.0E-100	BF327292.1	EST_HUMAN	H.sapiens CD97 gene exon 4
11618	24556	38118	1.78	1.0E-100	X94633.1	NT	H.sapiens CD97 gene exon 4
11618	24556	38119	1.78	1.0E-100	X94633.1	NT	H.sapiens CD97 gene exon 4
11681	24647	38223	3.57	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11681	24647	38224	3.57	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11712	13123	28021	1.86	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
11889	24968		2	1.0E-100	AF266265.1	NT	Homo sapiens golgin-like protein (GLP) gene, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12127	24998	38800	3.03	1.0E-100	AJ131034.1	NT	Homo sapiens case gene, exon 12
12128	24997	38801	1.66	1.0E-100	BE791491.1	EST_HUMAN	601588031F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3940423 5'
12177	25025	38822	15.03	1.0E-100	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12307	25951		2.32	1.0E-100	BF446549.1	EST_HUMAN	7q88h03.x1 NCJ_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3' similar to TRQ21897 Q21897 COSMID R151. [2] TR:Q9UJA08 ;
12488	26233	31769	2.58	1.0E-100	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
13084	25815	31681	8.6	1.0E-100	11417974	NT	Homo sapiens transcobalamin II, macrocytic anemia (TCN2), mRNA
78	13195	28118	1.19	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
78	13196	28119	1.19	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
687	13750	28676	2.63	1.0E-101	AB007915.2	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
705	13767	28702	6.85	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
705	13767	28703	6.85	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
772	13831	28776	1.48	1.0E-101	7657454	NT	Homo sapiens pascadillo (zebrafish) homolog 1, containing BRCT domain (PEST1), mRNA
854	13910	28888	2.88	1.0E-101	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
924	13977	28829	1.22	1.0E-101	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
987	14038	28894	7.23	1.0E-101	BF681218.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4237281 5'
1055	14101	27051	0.78	1.0E-101	A1221676.1	EST_HUMAN	q99e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1943338 3'
1586	14619	27594	1.34	1.0E-101	5821480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1586	14619	27595	1.34	1.0E-101	5821480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1761	14790	27776	1.12	1.0E-101	7862183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1761	14790	27777	1.12	1.0E-101	7862183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1862	14984	27987	1.68	1.0E-101	4502998	NT	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2072	15089	28107	1.07	1.0E-101	BE943070.1	EST_HUMAN	RC3-ST0281-160600-016-h09 ST0281 Homo sapiens cDNA
2357	15891	28387	1.17	1.0E-101	5723692	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2622	15821	28648	5.3	1.0E-101	X72983.1	NT	H. sapiens EWS gene, exon 5
2763	15745	28763	2.07	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2763	15745	28764	2.07	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2867	16025		13.42	1.0E-101	AJ252312.1	NT	Homo sapiens genomic downstream Rhesus box
3216	16271	28194	1.89	1.0E-101	4885270	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
3255	16309		2.49	1.0E-101	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862086 5'
3392	16441	28367	1.73	1.0E-101	AW965566.1	EST_HUMAN	EST377629 MAGI_HMG resequences, MAGI Homo sapiens cDNA
3411	15745	28763	2.03	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3411	15745	28764	2.03	1.0E-101	AJ237744.1	NT	Homo sapiens RIBLIR gene (partial), exon 12
3680	16930	28639	4.58	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
5072	18082	30963	1.54	1.0E-101	5921480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5072	18082	30964	1.54	1.0E-101	5921480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5391	18494	31371	2.08	1.0E-101	AW665139.1	EST_HUMAN	EST137212 IMAGE resequences, MAGI Homo sapiens cDNA
6118	19198	32420	3.59	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6118	19198	32421	3.59	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6853	19806	33202	1.16	1.0E-101	11430734	NT	Homo sapiens carbonic anhydrase VII (CA7), mRNA
7488	20453		1.16	1.0E-101	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7542	20505	33963	4.82	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7542	20505	33964	4.82	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7717	20674	34040	7.39	1.0E-101	AW008475.1	EST_HUMAN	hw58f12.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2833487 3'
7826	20774		1.78	1.0E-101	BE267384.1	EST_HUMAN	601109217F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3346901 5'
7983	20892	34327	6.3	1.0E-101	BF330758.1	EST_HUMAN	RC1-BT0313-220700-018-F12 BT0313 Homo sapiens cDNA
8245	21214	34621	1.07	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345868 5'
8245	21214	34622	1.07	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345868 5'
8390	21359	34768	5.11	1.0E-101	BF028174.1	EST_HUMAN	601764686F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3996837 5'
8685	21633	35053	0.83	1.0E-101	AW630070.1	EST_HUMAN	hh74g10.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2868578 5' similar to gb.J03143
8685	21633	35054	0.83	1.0E-101	AW630070.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9384	22328	35768	0.93	1.0E-101	AA038800.1	EST_HUMAN	hh74g10.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2868578 5' similar to gb.J03143
9685	22636	36094	0.82	1.0E-101	AB037772.1	NT	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9685	22638	36095	0.82	1.0E-101	AB037772.1	NT	hh74g10.y1 Scores_pregnant uterus NIH-IPU Homo sapiens cDNA clone IMAGE:471988 5' similar to
9817	21139	34544	19.42	1.0E-101	X60069.1	NT	PIR-S54640 S54640 YD835.03c protein - yeast;
9817	21139	34545	19.42	1.0E-101	X60069.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9830	22679	36155	18.13	1.0E-101	8845492	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
10115	23041	36520	13.91	1.0E-101	BE619867.1	EST_HUMAN	Human mRNA for pancreatic gamma-glutamyltransferase
10115	23041	36521	13.91	1.0E-101	BE619867.1	EST_HUMAN	Human mRNA for pancreatic gamma-glutamyltransferase
10254	23179	36866	0.61	1.0E-101	10863960	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
10773	23694	37192	1.98	1.0E-101	11429127	NT	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
10807	23728	37228	0.56	1.0E-101	AI570283.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10807	23728	37230	0.56	1.0E-101	AI570283.1	EST_HUMAN	to77411.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb-M26326
10914	23834	37349	0.64	1.0E-101	BE973848.1	EST_HUMAN	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10914	23834	37350	0.64	1.0E-101	BE973848.1	EST_HUMAN	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
11226	24178	37706	2.38	1.0E-101	S38327.1	NT	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
12083	24955	38550		1.0E-101	AAS21316.1	EST_HUMAN	branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 185 nt, segment 8 of 9]
12735	25387		7.64	1.0E-101	AW988051.1	EST_HUMAN	EST23783 Bone marrow Homo sapiens cDNA 5' end similar to defensin 1
41	13161	26064	0.73	1.0E-102	AF012872.1	NT	QV1-DT0068-240200-085-e01 DT0068 Homo sapiens cDNA
341	13430	26351	5.2	1.0E-102	AL163303.2	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4IK230) mRNA, complete cds
778	13835	26781	1.07	1.0E-102	4557534	NT	Homo sapiens chromosome 21 segment HS21C103
1119	14163	27114	1.9	1.0E-102	M10378.1	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1273	14308	27288	2.27	1.0E-102	11437146	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1273	14308	27289	2.27	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1417	14450	27423	200.41	1.0E-102	BE408447.1	EST_HUMAN	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
2318	15328	28332	1.36	1.0E-102	AI124689.1	EST_HUMAN	601286982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3828901 5'
2318	15328	28353	1.36	1.0E-102	AI124689.1	EST_HUMAN	ant60c-10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1538954 3' similar to SW:GC95_HUMAN Q08379 GOLGIN-95 ;
3037	16095		0.73	1.0E-102	Y13632.1	NT	ant60c-10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1538954 3' similar to SW:GC95_HUMAN Q08379 GOLGIN-95 ;
3078	16135	29047	1.48	1.0E-102	7861979	NT	Homo sapiens PRKY exon 7
3160	16207	29120	3.24	1.0E-102	AU141005.1	EST_HUMAN	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3150	16207	29121	3.24	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4260	17288	30170	1.83	1.0E-102	AL163207.2	NT	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4441	17467	30358	1.96	1.0E-102	BE251310.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21G007
5157	18167	31045	1	1.0E-102	R68488.1	EST_HUMAN	601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343862 5'
5445	18547	31460	1.52	1.0E-102	AF007133.1	NT	y82c04.1 Soares placenta NB2HP Homo sapiens cDNA clone IMAGE:140834 5'
5842	18832		3.3	1.0E-102	AB034851.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5882	18971	32163	3.45	1.0E-102	7705398	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5882	18971	32164	3.45	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5889	18977	32169	0.98	1.0E-102	11433046	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
6425	19482	32744	2.74	1.0E-102	AI458825.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
7283	20016	33319	0.5	1.0E-102	AW451643.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
							ar6209.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2151785 3' similar to TR-Q13137 Q13137 NDP52 ;
							UH-HB13-aj-d-10-0-UJ.at NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736835 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7343	20314	33658	0.75	1.0E-102	BE728323.1	EST_HUMAN	601561505F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3831241 5'
7371	20341	33683	0.77	1.0E-102	BE386108.1	EST_HUMAN	601277215F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3818243 5'
7404	20469	33818	0.54	1.0E-102	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7578	20540	33888	8.85	1.0E-102	AJ238994.1	NT	Homo sapiens mRNA for Centaurin-alpha2 protein
7888	20830	34208	2.64	1.0E-102	AV710738.1	EST_HUMAN	AV710738 Cu Homo sapiens cDNA clone QAAKD03 5'
8168	21106	34505	0.58	1.0E-102	10847053	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA
8565	21533	34953	3.61	1.0E-102	BE763051.1	EST_HUMAN	QV3-NT0025-210800-236-H08 NT0025 Homo sapiens cDNA
8645	21613	35035	0.91	1.0E-102	BE910555.1	EST_HUMAN	601501107F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3903145 5'
8839	21808	35223	1.22	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GKC Homo sapiens cDNA clone GKCEEE11 5'
8839	21808	35224	1.22	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GKC Homo sapiens cDNA clone GKCEEE11 5'
8950	21916	35340	0.74	1.0E-102	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9283	22249	35679	0.73	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
9283	22249	35680	0.73	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
							wf63b08.x1 NCJ_CGAP_K612 Homo sapiens cDNA clone IMAGE:2397871 3' similar to contains MER4.1
9608	22610	36082	0.56	1.0E-102	AI762859.1	EST_HUMAN	MER4 MER4 repetitive element;
9636	22580	36030	0.89	1.0E-102	AV768942.1	EST_HUMAN	AV758842 BM Homo sapiens cDNA clone BMFAUD08 5'
9676	22629	36082	2.15	1.0E-102	T70393.1	EST_HUMAN	yd13d07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
9676	22629	36083	2.15	1.0E-102	T70393.1	EST_HUMAN	yd13d07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
9766	22707	36163	3.86	1.0E-102	AU124629.1	EST_HUMAN	AU124629 NT2RM4 Homo sapiens cDNA clone NT2RM400309 5'
10748	23670		0.71	1.0E-102	AF153715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
10798	23719	37221	0.43	1.0E-102	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
10798	23719	37222	0.43	1.0E-102	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
10835	23755	37254	3	1.0E-102	AI905037.1	EST_HUMAN	RC-BT074-260469-014 BT074 Homo sapiens cDNA
10835	23755	37255	3	1.0E-102	AI905037.1	EST_HUMAN	RC-BT074-260469-014 BT074 Homo sapiens cDNA
							cn57H04.s1 Soares_NFL_T_G9C_S1 Homo sapiens cDNA clone IMAGE:1560823 3' similar to
							SW-CAV2_HUMAN P51636 CAVEOLIN-2, [1]:
10888	23816	37323	1.15	1.0E-102	AA970788.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11410	24354	37887	2.36	1.0E-102	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11410	24354	37888	2.36	1.0E-102	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11732	24618	38185	2.7	1.0E-102	BF358243.1	EST_HUMAN	RC9-EIT0072-150600-011-F01 ET0072 Homo sapiens cDNA
							Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
12019	24898	38404	4.74	1.0E-102	U41302.1	NT	Human unconventional myosin-ID (MYO1F) gene, partial cds
12079	24951	38546	5.67	1.0E-102	U57053.1	NT	Human sapiens chromosome 21 segment HS21C080
12182	25030		2.49	1.0E-102	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
12727	25380	31748	4.15	1.0E-102	AW300882.1	EST_HUMAN	xk07c12.x1 NCJ_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2666038 3'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptior
13028	25576		1.58	1.0E-102	J08235.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
70	13188	26107	1.14	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
70	13188	26108	1.14	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
100	13216	26140	9.55	1.0E-103	D87078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
209	13310	26237	4.18	1.0E-103	5453793	NT	Homo sapiens nuclear protein (KKEID repeat) (NOP56) mRNA
982	14033	26885	1.02	1.0E-103	AJ278348.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE gene)
1248	14284	27250	16.75	1.0E-103	BE877541.1	EST_HUMAN	601483388F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3887878 5'
1600	14632	27608	2.39	1.0E-103	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
1892	15013	28018	1.4	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
1932	15013	28019	1.4	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2313	15325	28348	0.93	1.0E-103	AU134891.1	EST_HUMAN	AU134891 PLACE1 Homo sapiens cDNA clone PLACE1000985 5'
2457	15461	28494	1.66	1.0E-103	AF006688.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
2601	15601	28622	1.07	1.0E-103	BF528378.1	EST_HUMAN	602041882F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179429 5'
2601	15601	28623	1.07	1.0E-103	BF528378.1	EST_HUMAN	602041882F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179429 5'
2627	15626	28650	1.01	1.0E-103	NS2770.1	EST_HUMAN	yw01d08.s1 Soares_placenta_860weeks_2N1b-IP8to9W Homo sapiens cDNA clone IMAGE:259599 3'
3082	16139		2.5	1.0E-103	BE744722.1	EST_HUMAN	601573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834315 5'
3391	16440	29368	4.42	1.0E-103	AW288245.1	EST_HUMAN	UI-H-BW0-qh-11-0-UI.s1 NCI_CGAP_Sub66 Homo sapiens cDNA clone IMAGE:2733165 3'
3453	16499	29416	1.29	1.0E-103	AB040892.1	NT	Homo sapiens mRNA for KIAA1469 protein, partial cds
3767	16809		5.31	1.0E-103	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
3808	16848	29756	1.26	1.0E-103	AA485983.1	EST_HUMAN	ab10d12.s1 Striatogene lung (#837210) Homo sapiens cDNA clone IMAGE:340407 3' similar to contains element LTR10 repetitive element:
3941	16881	29785	3.16	1.0E-103	11430878	NT	Homo sapiens neuropilin 1 (NRP1), mRNA
4028	17087	29868	2.9	1.0E-103	T23883.1	EST_HUMAN	sag340 b4HB3MA-Cdt109+10-Bio Homo sapiens cDNA clone b4HB3MA-Cdt109+10-Bio-7 3'
4958	17875	30763	0.83	1.0E-103	BE900293.1	EST_HUMAN	601673135F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3855853 5'
6044	19126	32332	0.96	1.0E-103	BF568627.1	EST_HUMAN	602186023F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310573 5'
6052	19133	32342	1.87	1.0E-103	AF179395.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
6398	19466	32712	0.73	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6398	19466	32713	0.73	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6602	19661	32833	0.79	1.0E-103	AW954568.1	EST_HUMAN	EST366636 MAGC resequences, MAGC Homo sapiens cDNA
6602	19661	32834	0.79	1.0E-103	AW954568.1	EST_HUMAN	EST366636 MAGC resequences, MAGC Homo sapiens cDNA
6947	19705	32981	0.53	1.0E-103	10947051	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 1, mRNA
6746	26867	33081	1.26	1.0E-103	AA781442.1	EST_HUMAN	ag28e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391452 3'
6787	19842	33125	0.98	1.0E-103	AF063460.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6878	18931	33228	1.47	1.0E-103	AI590071.1	EST_HUMAN	tm5805.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TRCQ13769
6879	18931	33230	1.47	1.0E-103	AI590071.1	EST_HUMAN	Q13769 ANONYMOUS. ; tm5805.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TRCQ13769
7024	18356	31275	1.73	1.0E-103	5032282	NT	Q13769 ANONYMOUS. ; Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS208, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
7024	18356	31276	1.73	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS208, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
7181	18393	31237	1.82	1.0E-103	11431100	NT	Homo sapiens ribosomal protein L3-like (RPL3L), mRNA
7234	20255	33589	1.06	1.0E-103	AJ289880.1	NT	Homo sapiens KIA0851 gene (partial), XT3 gene and LZTFL1 gene
7437	20404	33768	2.88	1.0E-103	AW965776.1	EST_HUMAN	EST377849 IMAGE resequencing, MAGI Homo sapiens cDNA
7558	20519	33874	3.47	1.0E-103	BE748168.1	EST_HUMAN	601571637F1 NIH_MGC 55 Homo sapiens cDNA clone IMAGE:3838545 5'
8051	20988	34384	3.89	1.0E-103	AI590071.1	EST_HUMAN	tm5805.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TRCQ13769
8051	20988	34385	3.89	1.0E-103	AI590071.1	EST_HUMAN	Q13769 ANONYMOUS. ;
8832	21600	35022	0.43	1.0E-103	T31080.1	EST_HUMAN	EST27183 Human Brain Homo sapiens cDNA 5' end similar to None
8868	21834	35359	0.82	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
8868	21834	35360	0.82	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
9051	22017	35441	1.06	1.0E-103	BF103244.1	EST_HUMAN	7160603.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3526884 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;
9463	22427	35895	2.86	1.0E-103	6005821	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9463	22427	35896	2.86	1.0E-103	6005821	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9503	22467	35908	1.13	1.0E-103	AA581088.1	EST_HUMAN	nd13002.x1 NCI_CGAP_Ov1 Homo sapiens cDNA clone IMAGE:800162 3' similar to gb:U02428 26S PROTEASE SUBUNIT 4 (HUMAN);
9544	22507	35956	0.48	1.0E-103	AA774980.1	EST_HUMAN	ae84d12.st Strabagene schizo brain S11 Homo sapiens cDNA clone IMAGE:970871 3' similar to gb:U03747 cds1 SODIUMPOTASSIUM-TRANSPORTING ATPASE BETA-1 (HUMAN);
10418	23340	36826	1.28	1.0E-103	Z37976.1	NT	H sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
10459	23381	36874	1.81	1.0E-103	AW683676.1	EST_HUMAN	EST376749 IMAGE resequencing, MAGI Homo sapiens cDNA
10598	23520	37012	10.03	1.0E-103	AI878958.1	EST_HUMAN	au51604.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518326 5' similar to TR:O15046 O15046 KIAA0338 ;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11004	23970	37494	1.64	1.0E-103	BE546708.1	EST_HUMAN	7b41r03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3230813 3' similar to gb:A63043 MAJOR HISTOCOMPATIBILITY COMPLEX ENHANCER-BINDING PROTEIN (HUMAN);
11085	24046	37668	3.88	1.0E-103	AJ782759.1	EST_HUMAN	002008.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TRCQ62084 Q62084 PHOSPHOLIPASE C NEIGHBORING ;
11183	24139	37672	1.98	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11183	24139	37673	1.98	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11341	24291		1.48	1.0E-103	BE671418.1	EST_HUMAN	7e50r08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3285927 3' similar to gb:J05272 INOSINE-5'-MONOPHOSPHATE DEHYDROGENASE 1 (HUMAN);
11570	24509	38068	6	1.0E-103	BE86278.1	EST_HUMAN	601506347F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3808147 5'
11702	24697	38244	2.59	1.0E-103	AU138283.1	EST_HUMAN	AU138283 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
11774	23929	37450	7.57	1.0E-103	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
11680	24857		1.47	1.0E-103	AB024759.1	NT	Homo sapiens TSA305 gene, exon 16
12047	24920	38516	2.25	1.0E-103	BE844611.1	EST_HUMAN	7e88r10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3287610 3' similar to contains MER29.13 MER29 repetitive element;
12178	25026		1.88	1.0E-103	AF224699.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12208	25049		1.95	1.0E-103	11528291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12410	25183	31820	4.32	1.0E-103	AB011398.1	NT	Homo sapiens gene for AF-8, complete cds
238	13338	28260	1.65	1.0E-104	AL037549.3	EST_HUMAN	DKFZ564H1072_1 584 (synonym: hfr2) Homo sapiens cDNA clone DKFZ564H1072 5'
238	13338	28281	1.65	1.0E-104	AL037549.3	EST_HUMAN	DKFZ564H1072_1 584 (synonym: hfr2) Homo sapiens cDNA clone DKFZ564H1072 5'
1805	14928	27925	1.88	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2203	15218	28238	2.52	1.0E-104	AA132975.1	EST_HUMAN	zo22c06.s1 Stratagene cdon (#837204) Homo sapiens cDNA clone IMAGE:587628 3' similar to gb:Z14118_mel1 CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2214	15228	28251	2.87	1.0E-104	BE744828.1	EST_HUMAN	601577480F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926438 5'
2377	15395	28408	1.02	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110800-214-F12 CT0249 Homo sapiens cDNA
2377	15395	28409	1.02	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110800-214-F12 CT0249 Homo sapiens cDNA
2444	15450	28469	2.43	1.0E-104	5031670	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2882	15941	28938	7.18	1.0E-104	M34671.1	NT	Human lymphocyte antigen CD58/MEIA43 mRNA, complete cds
2927	15985		2.84	1.0E-104	Y11151.1	NT	H. sapiens gene encoding phenylpyruvate tautomerase II
3277	16331	28252	0.94	1.0E-104	AU133928.1	EST_HUMAN	AU133928 OVARC1 Homo sapiens cDNA clone OVARC1000936 5'
3402	16451		1.88	1.0E-104	AA319436.1	EST_HUMAN	EST21668 Adrenal gland tumor Homo sapiens cDNA 5' end
3615	16659	29577	0.8	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3616	16659	29578	0.9	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3663	17003	28917	0.94	1.0E-104	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4166	17187	30076	0.88	1.0E-104	F11745.1	EST_HUMAN	HSC31A071 normalized infant brain cDNA Homo sapiens cDNA clone c-31a07
4404	17432	30317	4.11	1.0E-104	X02761.1	NT	Human mRNA for fibronectin (FN precursor)
4639	17660	30547	1.44	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
4639	17660	30548	1.44	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5255	18263	31132	1.02	1.0E-104	4885570	NT	Homo sapiens novel centrosomal protein RanBPM (RANBPM), mRNA
5292	18267	31158	0.83	1.0E-104	AF202314.1	NT	Homo sapiens erythropoietin (EPO) gene, exons 4 and 5 and complete cds
5292	18267	31159	0.83	1.0E-104	AF202314.1	NT	Homo sapiens erythropoietin (EPO) gene, exons 4 and 5 and complete cds
6050	19131	32338	1.44	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6050	19131	32339	1.44	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6100	19179	32398	0.89	1.0E-104	AB017332.1	NT	Homo sapiens alk3 mRNA for Aurora/Ip1-related kinase 3, complete cds
6611	19669	32945	24.48	1.0E-104	A1768797.1	EST_HUMAN	w03612.x1 NCI CGAP Kid12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TRQ14145 Q14145
6611	19669	32946	24.48	1.0E-104	A1768797.1	EST_HUMAN	KIAA0132 PROTEIN, contains element LTR7 repetitive element;
6805	19859	33146	0.92	1.0E-104	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6873	20196	33523	1.53	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
6873	20196	33524	1.53	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
7435	20402	33756	2.14	1.0E-104	11423572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8044	21910	35335	0.74	1.0E-104	BF509244.1	EST_HUMAN	U1H-B14-00w-b-08-0-11.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3088176 3'
9622	22485	35932	3.56	1.0E-104	BF448230.1	EST_HUMAN	nad16g11.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3365948 3'
9618	22562	36010	0.93	1.0E-104	AA682308.1	EST_HUMAN	z08b05.s1 Scores fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462897 3'
9639	22583	36073	1.21	1.0E-104	T74219.1	EST_HUMAN	yc6302.r1 Scores infant brain 1N1B Homo sapiens cDNA clone IMAGE:22440 5'
9669	22822	36074	4.58	1.0E-104	AF081395.1	NT	Homo sapiens T10 isoform mRNA, complete cds
9669	22822	36074	4.59	1.0E-104	AF081395.1	NT	Homo sapiens T10 isoform mRNA, complete cds
9786	21119	34520	4.97	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9798	21119	34521	4.97	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
10111	23037	36516	0.89	1.0E-104	AW103848.1	EST_HUMAN	xd76d02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TRQ24116
10111	23037	36517	0.89	1.0E-104	AW103848.1	EST_HUMAN	Q24116 HYPOTHETICAL 29.4 KD PROTEIN;
10307	23231	36714	0.82	1.0E-104	AF113514.1	NT	Q24116 HYPOTHETICAL 29.4 KD PROTEIN;
10453	23375	36867	3.35	1.0E-104	BE791713.1	EST_HUMAN	Homo sapiens histone acetyltransferase MORF mRNA, complete cds
10453	23375	36868	3.35	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3835977 5'
10765	23686	37182	1.56	1.0E-104	AV728070.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3835977 5'

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10808	23728	37231	5.11	1.0E-104	AU130765.1	EST_HUMAN	AU130765 NT2RP3 Homo sapiens cDNA clone NT2RP3001398 5'
10917	23837	37353	4.5	1.0E-104	U66535.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
10931	23851		0.82	1.0E-104	11427757	NT	Homo sapiens KIAA0049 gene product (KIAA0049), mRNA
11629	24567	38129	3.09	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11629	24567	38130	3.09	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11658	24582	38165	3.48	1.0E-104	BF684288.1	EST_HUMAN	602141215F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302507 5'
12888	25548		1.43	1.0E-104	BE393882.1	EST_HUMAN	601312181F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3655678 5'
278	15810	26302	1.61	1.0E-105	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
425	13120	26018	9.28	1.0E-105	4505150	NT	Homo sapiens Meis1 (mouse) homolog (MEIS1) mRNA
586	13683	26576	3.89	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
596	13683	26577	3.89	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1689	14720		2.33	1.0E-105	AB020381.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
1837	14864	27882	1.47	1.0E-105	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1943	14967	27984	2.08	1.0E-105	D50818.1	NT	Human mRNA for KIAA0128 gene, partial cds
2199	15214	28234	2	1.0E-105	AA318369.1	EST_HUMAN	EST20609 Spleen1 Homo sapiens cDNA 5' and similar to autoimmune antigen Ku, p70/p80 subunit
2731	16726		1.07	1.0E-105	AA584808.1	EST_HUMAN	nc10405.e1 NC1_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100285 3'
3018	16078		3.14	1.0E-105	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3362	18412	28338	1.11	1.0E-105	7304622	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3362	18412	28337	1.11	1.0E-105	7304622	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4125	17158	30046	3.14	1.0E-105	AW861688.1	EST_HUMAN	EST373761 MAGE resequences, MAGG Homo sapiens cDNA
4773	17793	30684	0.69	1.0E-105	BE868881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4773	17793	30685	0.69	1.0E-105	BE868881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4783	17810	30702	1.65	1.0E-105	AA688335.1	EST_HUMAN	z44g02.a1 Soares_fetal_liver_spleen_1NFS_S1 Homo sapiens cDNA clone IMAGE:433682 3'
4978	17981		4.04	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5147	18158	31036	1.21	1.0E-105	AB018339.1	NT	Homo sapiens mRNA for KIAA0788 protein, partial cds
5403	18508	31983	0.7	1.0E-105	AF016704.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBESA) gene, exon 2
5471	18572		1.02	1.0E-105	11420134	NT	Homo sapiens Refine-derived POU-domain factor-1 (RPF-1), mRNA
7089	20023	33324	1.57	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7089	20023	33325	1.57	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7174	18405	31203	3.49	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7174	18405	31204	3.49	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7223	20245	33579	0.56	1.0E-105	AW951634.1	EST_HUMAN	EST363689 MAGE resequences, MAGB Homo sapiens cDNA
7501	20466	33827	0.69	1.0E-105	BE802616.1	EST_HUMAN	601677279F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960019 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8192	21182	34572	1.09	1.0E-105	X12558.1	NT	Human mRNA for dbl proto-oncogene
8362	21331	34743	8.09	1.0E-105	T05087.1	EST_HUMAN	EST02875 Fetal brain, Strabagene (catf9333208) Homo sapiens cDNA clone HFBOR32
8741	21709	35132	1.52	1.0E-105	AW007194.1	EST_HUMAN	ws50c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500826 3' similar to SW-ACSA_PENCH P36333 ACETYL-COENZYME A SYNTHETASE ;
9280	22246	35876	0.75	1.0E-105	AW840817.1	EST_HUMAN	RC1-CN008-070100-011-e05 CN008 Homo sapiens cDNA
9405	22370	35905	3.19	1.0E-105	AW016878.1	EST_HUMAN	UHF-B10p-ah-b-120-U1.s1 NCI_CGAP_Sul22 Homo sapiens cDNA clone IMAGE:2711782 3'
9558	22520	35968	0.91	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0082-140300-089-009 OT0082 Homo sapiens cDNA
9558	22520	35969	0.91	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0082-140300-089-009 OT0082 Homo sapiens cDNA
9828	22810	36282	0.76	1.0E-105	BE867783.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
9828	22810	36283	0.76	1.0E-105	BE867783.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
11278	24229	37756	4.59	1.0E-105	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
11584	24504	38061	1.61	1.0E-105	D63548.1	NT	Homo sapiens COL4A5 gene for a3(V) collagen, exon 31
11611	24549	38109	2.93	1.0E-105	7705936	NT	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
11914	24785	38398	2.81	1.0E-105	AW027554.1	EST_HUMAN	wf74807.x1 Soares_thymus_NHFT_Homo sapiens cDNA clone IMAGE:2535301 3' similar to TR-P87892
11984	24861	39457	2.56	1.0E-105	BF430821.1	EST_HUMAN	P87892 PROTEASE ;
12104	24975	39572	1.5	1.0E-105	AB004824.1	NT	7018c10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3574291 3' similar to TR-P97680 P97680
12104	24975	39573	1.5	1.0E-105	AB004824.1	NT	RIN1 ;
152	13255		1.76	1.0E-105	AW503208.1	EST_HUMAN	Homo sapiens gene for Smad 3, exon 2 and 3
208	13307	26235	1.59	1.0E-105	AI555065.1	EST_HUMAN	Homo sapiens gene for Smad 3, exon 2 and 3
543	13614	26534	2.23	1.0E-105	AW665656.1	EST_HUMAN	UHF-BNO-ak-g-07-Q-U1.F1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
607	13674	26589	3.07	1.0E-105	J00146.1	NT	tg78c01.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2215008 3'
608	13674	26589	1.71	1.0E-105	J00146.1	NT	EST1377829 MAGE resequences, MAGI Homo sapiens cDNA
1712	14742	27726	4.6	1.0E-105	U48724.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
1732	14762	27746	1.01	1.0E-105	U04510.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
1820	14847	27839	4.27	1.0E-105	AA527446.1	EST_HUMAN	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds
1820	14847	27840	4.27	1.0E-105	AA527446.1	EST_HUMAN	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 41
2132	15149	28164	1.52	1.0E-105	BE144286.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
2325	15336	28359	3.89	1.0E-105	4504184	NT	LTR3 repetitive element ;
2512	15515	28339	1.07	1.0E-105	AF003528.1	NT	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
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							LTR3 repetitive element ;
							ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2610	15609	28633	1.78	1.0E-108	BE260201.1	EST_HUMAN	601148783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502461 5'
2768	15760	28782	4.05	1.0E-106	AU2768326.1	EST_HUMAN	q76h10.x1 Soares_NH-MP_u_S1 Homo sapiens cDNA clone IMAGE:1878307 3'
2836	14461	27437	1.13	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2836	14461	27438	1.13	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2836	15945	28660	0.88	1.0E-106	BE384286.1	EST_HUMAN	601272675F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3613818 5'
2852	16009	28634	4.42	1.0E-108	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
2852	16009	28635	4.42	1.0E-106	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
3195	16250	29108	1.72	1.0E-106	8922805	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3195	16250	29169	1.72	1.0E-108	8922805	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3454	16500	29417	1	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3454	16500	29418	1	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
4068	17104	28986	7.68	1.0E-108	AW974650.1	EST_HUMAN	EST386875 MAGC resequences, MAGN Homo sapiens cDNA
4068	17104	28997	7.68	1.0E-108	AW974650.1	EST_HUMAN	EST386875 MAGC resequences, MAGN Homo sapiens cDNA
4631	17652	30539	0.73	1.0E-108	BE144288.1	EST_HUMAN	MRO-H10165-140200-008-d10 H10165 Homo sapiens cDNA
4634	17950	30841	0.92	1.0E-108	U31520.1	NT	Human alpha mannosidase II mRNA, complete cds
5289	18284		0.96	1.0E-108	L41644.1	NT	Homo sapiens dystrophin gene, exon 41
5443	18545	31457	2.62	1.0E-106	AA781155.1	EST_HUMAN	aj24509.s1 Soares_Jasfia_NH-T Homo sapiens cDNA clone 1391225 3' similar to gb-X12433 PROTEIN
5954	19039	32236	0.82	1.0E-108	AU130113.1	EST_HUMAN	PHPS1-2 (HUMAN);
5954	19039	32237	0.82	1.0E-108	AU130113.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6009	19092	32292	0.58	1.0E-108	AA434168.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6108	19187	32408	0.78	1.0E-108	AU143428.1	EST_HUMAN	zw28d12.s1 Soares ovary tumor NIHOT Homo sapiens cDNA clone IMAGE:770615 3'
6108	19187	32407	0.78	1.0E-108	AU143428.1	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6221	19295	32529	19	1.0E-108	BF076574.1	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6332	19402	32643	0.68	1.0E-108	BE897112.1	EST_HUMAN	602154012F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285067 5'
6536	19402	32643	0.62	1.0E-108	BE897112.1	EST_HUMAN	601439670F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824641 5'
6559	19619	32884	17.32	1.0E-108	11545913	NT	601439670F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824641 5'
6559	19619	32885	17.32	1.0E-108	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
7596	20357	33917	5.25	1.0E-106	AA683779.1	EST_HUMAN	Homo sapiens xylosyltransferase II (XT2), mRNA
7655	20615	33979	6.04	1.0E-108	11428617	NT	ae72e07.s1 Stratiotes schizob brain S11 Homo sapiens cDNA clone IMAGE:968732 3' similar to gb-X06873
7746	20700	34066	1.17	1.0E-108	BE292722.1	EST_HUMAN	KINESIN HEAVY CHAIN (HUMAN);
7869	20813	34190	8.48	1.0E-106	11425503	NT	Homo sapiens XPMC2 protein (LOC57109), mRNA
7869	20813	34191	8.48	1.0E-106	11425503	NT	Homo sapiens XPMC2 protein (LOC57109), mRNA
7869	20813	34191	8.48	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA
7869	20813	34191	8.48	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8119	21056	34463	0.63	1.0E-106	AU116850.1	EST_HUMAN	AU116850 HEMBA1 Homo sapiens cDNA clone HEMBA1000129 5'
8317	21286	34689	5.05	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8317	21286	34700	5.05	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8515	21483	34897	108.87	1.0E-106	AI523068.1	EST_HUMAN	er68a07.x1 Blastoid aorta HPLRB8 Homo sapiens cDNA clone IMAGE:2127732 3' similar to gb:306233
8976	21942	35366	0.76	1.0E-106	BE387850.1	EST_HUMAN	CALGRANULIN B (HUMAN);
8976	21942	35367	0.76	1.0E-106	BE387850.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604463 5'
9054	22020	35445	3.3	1.0E-106	AI654123.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604463 5'
9060	22026	35449	0.53	1.0E-106	AI891109.1	EST_HUMAN	ly62a05.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2283632 3' similar to SW:CA8_HUMAN
9407	22372	35807	0.87	1.0E-106	AW538831.1	EST_HUMAN	Q05094 69 KD ISLET CELL AUTOANTIGEN;
9502	22466	35906	2.47	1.0E-106	AA825307.1	EST_HUMAN	wu38a03.x1 Soares Dieckgrafe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2622308 3' similar to
9502	22466	35907	2.47	1.0E-106	AA825307.1	EST_HUMAN	TR:O70273 O70273 ETS HOMOLOGOUS FACTOR;
9841	22585	36034	1.55	1.0E-106	AI760447.1	EST_HUMAN	CNA-LT0058-150200-088-e08 LT0058 Homo sapiens cDNA
9784	22725	36181	1.81	1.0E-106	AI479569.1	EST_HUMAN	cc87e08.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1354790 3'
9784	22725	36182	1.81	1.0E-106	AI479569.1	EST_HUMAN	cc87e08.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1354790 3'
10361	23284	36761	1.22	1.0E-106	BE388234.1	EST_HUMAN	cr03a04.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cr03a04 random
10444	23366	36856	0.92	1.0E-106	BF027310.1	EST_HUMAN	tm41f02.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2160689 3' similar to contains MSR1.13
10444	23366	36857	0.92	1.0E-106	BF027310.1	EST_HUMAN	TAR1 PTR5 repetitive element;
10801	23523	37017	5.46	1.0E-106	AA604417.1	EST_HUMAN	tm41f02.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2160689 3' similar to contains MSR1.13
10801	23523	37018	5.46	1.0E-106	AA604417.1	EST_HUMAN	TAR1 PTR5 repetitive element;
10848	23570	37066	1.58	1.0E-106	AW363299.1	EST_HUMAN	601282367F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604217 5'
10853	23575	37071	0.5	1.0E-106	11436432	NT	6011671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10853	23575	37072	0.5	1.0E-106	11436432	NT	6011671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10827	23748	37249	0.49	1.0E-106	AL039886.1	EST_HUMAN	6011671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10944	23864	37379	3.52	1.0E-106	AL163202.2	NT	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
11242	24195	37713	4.84	1.0E-106	BF032755.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
11242	24195	37714	4.84	1.0E-106	BF032755.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
11402	24346	37879	2.76	1.0E-106	J05200.1	NT	RCO-CT0318-201109-031-e11 CT0318 Homo sapiens cDNA
11402	24346	37880	2.76	1.0E-106	J05200.1	NT	Homo sapiens multimeth (MMRN), mRNA
							Homo sapiens multimeth (MMRN), mRNA
							Homo sapiens multimeth (MMRN), mRNA
							DKFZp434F0712.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434F0712 5'
							Homo sapiens chromosome 21 segment HS21C002
							601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
							601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
							Human ryanodine receptor mRNA, complete cds
							Human ryanodine receptor mRNA, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11798	24622	38200	3.21	1.0E-108	BE257385.1	EST_HUMAN	601102210F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3349997 5'
12260	25763		8.02	1.0E-108	AW410405.1	EST_HUMAN	fl05h11.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861644 5'
12481	25228	31798	3.58	1.0E-108	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12481	25229	31797	3.58	1.0E-108	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12687	25354		4.46	1.0E-108	BE689805.1	EST_HUMAN	RG1-CT0249-090800-024-005 CT0249 Homo sapiens cDNA
237	13337		4.28	1.0E-107	AL271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
284	13380		1.85	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
631	13696	26816	3.38	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
814	13872	26820	2.77	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
887	13942	26800	1.31	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
970	14022	26975	12.86	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1283	14318	27281	1.8	1.0E-107	AB032283.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1573	14606	27579	3.93	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120900-368-e05 HT0540 Homo sapiens cDNA
1767	14796	27781	2.54	1.0E-107	AF138275.1	NT	Homo sapiens cathepsin Z precursor (GTSZ) gene, exon 3
1867	14883	27879	0.96	1.0E-107	AB007822.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
1857	14883	27880	0.98	1.0E-107	AB007822.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
2218	15232	28256	1.11	1.0E-107	U13728.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2370	15378	28401	1.02	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
2370	15378	28402	1.02	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
2540	15542	28598	1.12	1.0E-107	BE732480.1	EST_HUMAN	601567610F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
2540	15542	28597	1.12	1.0E-107	BE732480.1	EST_HUMAN	601567610F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
3019	16077	28997	3.8	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
3019	16077	28998	3.8	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
3116	16173	29083	3.16	1.0E-107	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
3839	16879	29782	4.78	1.0E-107	AF020671.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
5706	18801	31978	0.56	1.0E-107	AW869038.1	EST_HUMAN	EST381116 IMAGE resequences, MAGK Homo sapiens cDNA
5865	19050	32251	3.4	1.0E-107	BE867460.1	EST_HUMAN	601442558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846494 5'
6875	20188	33627	0.56	1.0E-107	6005708	NT	Homo sapiens A kinase (PRKA) anchor protein 10 (AKAP10), mRNA
7107	20041	33943	0.83	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD) (GTF3C1), mRNA
7107	20041	33944	0.83	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD) (GTF3C1), mRNA
7588	20549	33909	1.16	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BNO-aff-c-08-U1.71 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078310 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7588	20549	33910	1.16	1.0E-107	AW503913.1	EST_HUMAN	U1HF-BND-eff-c-08-O-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078310 5'
7773	20728	34088	1.54	1.0E-107	AF765078.1	EST_HUMAN	W556104.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384781 3'
8004	20843	34336	0.81	1.0E-107	AJ404468.1	NT	Homo sapiens mRNA for dynamin heavy chain (DNAH9 gene)
8004	20843	34337	0.81	1.0E-107	AJ404468.1	NT	Homo sapiens mRNA for dynamin heavy chain (DNAH9 gene)
8078	21015	34415	0.59	1.0E-107	AW410861.1	EST_HUMAN	ff08d11.x2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2884624 5'
8742	22770	36225	1	1.0E-107	AU122469.1	EST_HUMAN	AU122469 MAMMA1 Homo sapiens cDNA clone MAMMA1002433 5'
11061	24024	37648	2.92	1.0E-107	AB392850.1	EST_HUMAN	P06085 ALPHA-ACTININ 3, NON MUSCULAR;
11283	24243	37770	1.52	1.0E-107	L49141.1	NT	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
11308	24258	37784	2.09	1.0E-107	BF688511.1	EST_HUMAN	802123933F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281039 5'
11651	24588	38158	4.78	1.0E-107	BE540550.1	EST_HUMAN	801086381F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452829 5'
11721	23918	37435	2.44	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11721	23918	37436	2.44	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
12321	25902		5.18	1.0E-107	AA001415.1	EST_HUMAN	z846d01.s1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:361844 3' similar to contains THR.b1
12345	25769		1.48	1.0E-107	11418318	NT	THR repetitive element;
866	14009	26862	1.66	1.0E-108	BE268042.1	EST_HUMAN	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
1270	14305	27265	4.89	1.0E-108	Y18000.1	NT	601177018F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532348 5'
2091	15108	28127	1.24	1.0E-108	BF028728.1	EST_HUMAN	Homo sapiens NF2 gene
							601671814F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954839 5'
2435	15442	28460	9.44	1.0E-108	BE206894.1	EST_HUMAN	bb25b10.x1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963888 3' similar to gb:U53777 60S
3360	16410	28332	0.79	1.0E-108	AF032897.1	NT	RIBOSOMAL PROTEIN L23 (HUMAN); gb:U52777 Mouse hexadecase mRNA, complete cds (MOUSE);
3360	16410	28333	0.79	1.0E-108	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4184	17215	30102	1.13	1.0E-108	AW684338.1	EST_HUMAN	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4555	17578	30468	1.73	1.0E-108	U72861.1	NT	h12a11.x1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972060 3' similar to SW:38P1_MOUSE
4555	17578	30469	1.73	1.0E-108	U72861.1	NT	P55184 SH3-BINDING PROTEIN 3BP-1;
4842	17859	30764	1.39	1.0E-108	7681979	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4866	17971	30882	0.98	1.0E-108	AW504793.1	EST_HUMAN	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4866	18001	30890	2.59	1.0E-108	AJ008005.1	EST_HUMAN	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5184	18193	31068	0.71	1.0E-108	5031824	NT	U1HF-BND-din-a-04-O-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3080166 5'
5556	18663	31597	1.1	1.0E-108	AW384094.1	EST_HUMAN	Homo sapiens PSN1 gene, alternative transcript
5605	18701	31673	2.27	1.0E-108	BE669016.1	EST_HUMAN	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
							RCO-HT0372-241189-031-c03 HT0372 Homo sapiens cDNA
							601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5605	18701	31674	2.27	1.0E-108	BE869018.1	EST_HUMAN	60144482ZF1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'
6036	18118		0.8	1.0E-108	AF012623.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 20
6117	19195	32419	0.82	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6282	18335	32567	6.27	1.0E-108	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6282	18335	32568	6.27	1.0E-108	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6392	19480	32708	1.22	1.0E-108	AJ183269.1	NT	Homo sapiens caveolin-1/2 locus, Cori1g1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
6494	19195	32419	0.89	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6773	19828	33110	0.67	1.0E-108	AF016708.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
6773	19828	33111	0.67	1.0E-108	AF016708.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
7365	20335	33685	5.42	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPRC5B), mRNA
7673	20631	33995	1.98	1.0E-108	4758333	NT	Homo sapiens delta-8 fatty acid desaturase (FADS2) mRNA
7718	20676	34041	1.13	1.0E-108	BE252807.1	EST_HUMAN	601113471F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354084 5'
7749	20702	34069	0.68	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181037 5'
7749	20702	34070	0.68	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181037 5'
8149	21086	34485	0.57	1.0E-108	11422155	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
8399	21368		1.8	1.0E-108	AF083500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8452	21421	34835	5.44	1.0E-108	AW408694.1	EST_HUMAN	U1HF-BMD-eds-e-12-Q-U1.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
8492	21421	34836	5.44	1.0E-108	AW408694.1	EST_HUMAN	U1HF-BMD-eds-e-12-Q-U1.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
9402	22367	35800	0.93	1.0E-108	AF203977.1	NT	Homo sapiens ETS-family transcription factor EHF (EHF) mRNA, complete cds
9441	22405	35842	0.48	1.0E-108	N44674.1	EST_HUMAN	y935h10.1 Soares melanocyte 2N4HM Homo sapiens cDNA clone IMAGE:273283 5' similar to PIRCA45773 A45773 kelch protein, long form - fruit fly
10683	23903	37417	2.67	1.0E-108	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC83446), mRNA
11027	21040	34439	2.14	1.0E-108	BE535227.1	EST_HUMAN	601058769F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3448361 5'
11177	18353	31298	1.84	1.0E-108	Y12490.1	NT	Homo sapiens mRNA for Golgi-associated microtubule-binding protein (GMAP-210)
11602	24540	38099	3.33	1.0E-108	AW968185.1	EST_HUMAN	EST1378258 MAGC resequences, MAG1 Homo sapiens cDNA
11653	24580	38160	1.75	1.0E-108	AV708780.1	EST_HUMAN	AV708780 ADC Homo sapiens cDNA clone ADCAE03 5'
11653	24590	38161	1.75	1.0E-108	AV708780.1	EST_HUMAN	AV708780 ADC Homo sapiens cDNA clone ADCAE03 5'
11698	24683		2.05	1.0E-108	11441485	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
11757	24685	36265	1.6	1.0E-108	D63639.1	NT	Homo sapiens COL4A6 gene for $\alpha 6(V)$ collagen, exon 28

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12493	25236	31800	5.14	1.0E-108	AK024447.1	NT	Homo sapiens mRNA for FLJ00037 protein, partial cds
12884	25467		11.97	1.0E-108	BF348356.1	EST_HUMAN	602018571F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4154287 5'
44	13184	28067	2.17	1.0E-108	AW803116.1	EST_HUMAN	IL2-UM0077-260400-078-D08 UM0077 Homo sapiens cDNA
67	13185	28104	0.88	1.0E-109	D88974.1	NT	Human mRNA for KIAA0220 gene, partial cds
220	13320	28245	1.51	1.0E-108	11422488	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
229	13328	28251	1.97	1.0E-109	11438391	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
467	13540	28465	2.2	1.0E-108	4507712	NT	Homo sapiens tetrapeptide repeat domain 2 (TTC2) mRNA
600	13667	28581	13.45	1.0E-108	AB023216.1	NT	Homo sapiens mRNA for KIAA0899 protein, partial cds
600	13667	28582	13.45	1.0E-109	AB023216.1	NT	Homo sapiens mRNA for KIAA0899 protein, partial cds
1014	14082	27013	0.98	1.0E-108	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C049
1207	14246	27204	23.08	1.0E-108	M28689.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
1208	14246	27204	21.33	1.0E-108	M28689.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
1644	14577	27549	1.2	1.0E-108	BE263673.1	EST_HUMAN	60118682F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2856836 5'
1644	14577	27550	1.2	1.0E-108	BE263673.1	EST_HUMAN	60118682F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2856836 5'
1891	14916	27011	1.83	1.0E-108	D13643.2	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2253	15287	28284	2.68	1.0E-108	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
2282	15276	28300	2.89	1.0E-108	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
2830	15629	28654	3.42	1.0E-108	AI022328.1	EST_HUMAN	ow85a01.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1854536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN.;
2830	15629	28655	3.42	1.0E-108	AI022328.1	EST_HUMAN	ow85a01.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1854536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN.;
2831	15630	28656	1.84	1.0E-108	4504208	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
3071	16128	28040	1.81	1.0E-108	N85190.1	EST_HUMAN	J2816F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2816 5' similar to ZINC FINGER PROTEIN ZNF43
3309	16448	29374	1.33	1.0E-108	AW803182.1	EST_HUMAN	CM8-NIN009-190400-150-F10 NN0009 Homo sapiens cDNA
3399	16448	29375	1.33	1.0E-108	AW803182.1	EST_HUMAN	CM8-NIN009-190400-150-F10 NN0009 Homo sapiens cDNA
3530	16576	28498	1.66	1.0E-108	AF240598.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3572	16617	28536	0.92	1.0E-108	M37828.1	NT	Homo sapiens adenosine monophosphate deaminase 1 (AMPD1) gene, exons 8-10
3572	16617	28539	0.92	1.0E-108	M37828.1	NT	Homo sapiens adenosine monophosphate deaminase 1 (AMPD1) gene, exons 8-10
3856	16898		2.3	1.0E-108	BE146144.1	EST_HUMAN	MFR0-HT0209-110400-108-a04 HT0209 Homo sapiens cDNA
4171	17202	30089	4.97	1.0E-108	AI655417.1	EST_HUMAN	ts98a06.x1 NCI_CGAP_GC06 Homo sapiens cDNA clone IMAGE:2236330 3' similar to WP:F63A2.8 CE16100;
4188	17220	30107	1.33	1.0E-108	AA682274.1	EST_HUMAN	ts93c12.s1 NCI_CGAP_P222 Homo sapiens cDNA clone IMAGE:1218282 3' similar to SW:GTT2_HUMAN P30712 GLUTATHIONE S-TRANSFERASE THETA 2;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4189	17220	30108	1.33	1.0E-109	AA062274.1	EST_HUMAN	nu60ct12.s1 NCI_CGAP_P22 Homo sapiens cDNA clone IMAGE:1216262 3' similar to SW:GTT2_HUMAN
4432	17459	30350	2.38	1.0E-109	4504208	NT	P30712 GLUTATHIONE S-TRANSFERASE THETA 2;
4630	17651	30538	1.42	1.0E-109	7820383	NT	Homo sapiens glutathione cyclase activator 1A (retina) (GUCA1A) mRNA
4638	17973	30884	0.94	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
5318	18424	31227	0.5	1.0E-109	AU137282.1	EST_HUMAN	ye48s08.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:53057 5'
5332	18438	31180	0.86	1.0E-109	BF673718.1	EST_HUMAN	AU137282 PLACE1 Homo sapiens cDNA clone PLACE1008169 5'
5388	18489	31384	2.28	1.0E-109	5174822	NT	602139448F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272822 5'
5688	18783	32323	1.49	1.0E-109	BE178358.1	EST_HUMAN	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
6037	25661	32323	0.83	1.0E-109	BF379888.1	EST_HUMAN	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6111	18783		1.28	1.0E-109	BE178358.1	EST_HUMAN	GM1-UT0038-060900-399-h07 UT0038 Homo sapiens cDNA
6485	19550	32789	0.57	1.0E-109	M23442.1	NT	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6485	19550	32800	0.57	1.0E-109	M23442.1	NT	Human Interleukin 4 (IL-4) gene, complete cds
6742	18797	33077	8.68	1.0E-109	AJ221385.1	EST_HUMAN	Human Interleukin 4 (IL-4) gene, complete cds
6833	20167	33476	0.52	1.0E-109	11024711	NT	cg86108.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842111 3'
6833	20167	33477	0.62	1.0E-109	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
7145	18377	31285	0.49	1.0E-109	BE074888.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
7451	20417	33772	0.93	1.0E-109	AB046811.1	NT	RC6-BT0580-170300-021-F08 BT0580 Homo sapiens cDNA
7815	20764	34140	3.31	1.0E-109	11432574	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
7817	20768	34142	5.45	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
7817	20768	34143	5.45	1.0E-109	BF182707.1	EST_HUMAN	601809465F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
8513	21481	34895	1.37	1.0E-109	AL046784.1	NT	601809465F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
8628	21598	35017	1.08	1.0E-109	AW749130.1	EST_HUMAN	Novel human gene mapping to chromosome 13
9004	21970		3.59	1.0E-109	AA077498.1	EST_HUMAN	PMO-BT0340-091289-002-e05 BT0340 Homo sapiens cDNA
9086	22062	35474	17.25	1.0E-109	BE787540.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
9086	22052	35475	17.25	1.0E-109	BE787540.1	EST_HUMAN	601479417F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882124 5'
							601479417F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882124 5'
9583	22555	36005	1.78	1.0E-109	H84860.1	EST_HUMAN	ye80g08.r1 Soares retina N265-IR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP-A53491
9705	22658	36113	0.65	1.0E-109	BE397068.1	EST_HUMAN	AS3491 BLUMETANIDE-SENSITIVE NA-K-Cl COTRANSPORTER - SPINY;
9705	22658	36114	0.65	1.0E-109	BE397068.1	EST_HUMAN	601289780F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
9839	22775	36230	2.5	1.0E-109	F06604.1	EST_HUMAN	601289780F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
11128	24088	37616	2.42	1.0E-109	BE540909.1	EST_HUMAN	HSC1EC121 normalized infant brain cDNA Homo sapiens cDNA clone c-1ec12
11128	24088	37617	2.42	1.0E-109	BE540909.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449590 5'
11153	24116	37642	31.85	1.0E-109	BF684831.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449590 5'
							602080724F2 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4245341 5'

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11459	24402	37850	1.65	1.0E-109	AU121370.1	EST_HUMAN	AU121370 HEMBB1 Homo sapiens cDNA clone HEMBB1002890 5'
11697	24682	38240	2.82	1.0E-109	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
11735	24621	38109	5.45	1.0E-109	W16510.1	EST_HUMAN	z08b012.1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:301439 5' similar to PIR:S43989 S43989 p54-beta stress-activated protein kinases - rat ;
11910	24791	38380	1.59	1.0E-109	BE046580.1	EST_HUMAN	h123705.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2855869 3' similar to TR:Q8Z124 Q8Z124
12125	24994	38597	2.03	1.0E-109	BF339540.1	EST_HUMAN	YGR163W MRNA HOMOLOGUE, COMPLETE CDS. ;
12125	24994	38598	2.03	1.0E-109	BF339540.1	EST_HUMAN	602039003F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4186753 5'
12132	25001	39607	1.65	1.0E-109	AA490558.1	EST_HUMAN	602039003F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4186753 5'
12395	15276	28300	2.1	1.0E-109	Y17123.1	NT	aa4207.1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:823621 5'
12613	15276	28300	2.24	1.0E-109	Y17123.1	NT	Homo sapiens SNF6/INI1 gene, exon 6
12720	25374	31774	1.85	1.0E-109	AB011399.1	NT	Homo sapiens SNF6/INI1 gene, exon 6
3	13124	26022	0.89	1.0E-110	7549804	NT	Homo sapiens gene for AF-6, complete cds
39	13169	26061	4.69	1.0E-110	6803073	NT	Homo sapiens deiodinase, leiodithyrotine, type II (DIO2), transcript variant 2, mRNA
39	13159	26062	4.69	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
109	13124	26022	1.73	1.0E-110	7549804	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
204	13388	26316	1.8	1.0E-110	D87291.1	NT	Homo sapiens deiodinase, leiodithyrotine, type II (DIO2), transcript variant 2, mRNA
528	13599	26517	13.41	1.0E-110	U84550.1	NT	Human mRNA for inward rectifier potassium channel, complete cds
1184	14225	27181	1	1.0E-110	5031620	NT	Human dystronin (DTN) gene, exon 20
1284	14319	27282	0.72	1.0E-110	AB032253.1	NT	Homo sapiens calcitonin receptor-like (CALCRL) mRNA
1837	14961	27858	1.35	1.0E-110	BE378477.1	EST_HUMAN	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
2073	15090		1.85	1.0E-110	BF508696.1	EST_HUMAN	601237545F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3009883 5'
2853	16913		1.05	1.0E-110	4503098	NT	UHH-BM-acc-b-05-0-JL.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085794 3'
3043	14319	27282	0.88	1.0E-110	AB032253.1	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
3103	16160		1.01	1.0E-110	U78027.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
3209	16284	29185	1.55	1.0E-110	11436041	NT	Homo sapiens Brn-1's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3209	16284	29186	1.55	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4231	17260	30145	0.93	1.0E-110	M16918.1	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4665	17688	30570	2.11	1.0E-110	AJ017213.1	EST_HUMAN	Human autoimmunity antigen small nuclear ribonucleoprotein E pseudogene
4684	17705	30597	4.29	1.0E-110	AJ117812.1	EST_HUMAN	alpha2b10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627983 3' similar to SW:NI21_RAT_P52591 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 ;
5009	18023		1.94	1.0E-110	7682441	NT	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
5367	18472	31343	2.23	1.0E-110	BE289406.1	EST_HUMAN	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
							601119710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5814	18904	32037	0.78	1.0E-110	BE621080.1	EST_HUMAN	607403677F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895795 5'
5834	18924	32106	7.66	1.0E-110	11418323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5834	18924	32108	7.66	1.0E-110	11418323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6878	25670	33228	3.64	1.0E-110	M55112.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 7
7235	20256	33590	0.59	1.0E-110	BE251496.1	EST_HUMAN	607103888F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3360277 5'
7309	20280	33619	0.71	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
7309	20280	33620	0.71	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
7645	20508	33967	0.69	1.0E-110	AJ560289.1	EST_HUMAN	tr12408.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2167407 3' similar to SW-ETV1_HUMAN
7656	20616	33980	10.79	1.0E-110	AV714276.1	EST_HUMAN	P50549 ETS TRANSLOCATION VARIANT 1;
7656	20616	33981	10.79	1.0E-110	AV714276.1	EST_HUMAN	AV714276 DCB Homo sapiens cDNA clone DCB0CGE01 5'
7688	20646	34010	2.64	1.0E-110	AB020675.1	NT	AV714276 DCB Homo sapiens cDNA clone DCB0CGE01 5'
7820	20769	34145	1.01	1.0E-110	AJ137823.1	EST_HUMAN	Homo sapiens mRNA for KIAA0898 protein, partial cds
9690	22843	36101	0.79	1.0E-110	BE302594.1	EST_HUMAN	AU137823 PLACE1 Homo sapiens cDNA clone PLACE1007511 5'
9836	22863	36324	3.25	1.0E-110	AW838394.1	EST_HUMAN	bs88601.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2305561 5' similar to TR-077258 O77258
10688	23608	37102	3.4	1.0E-110	11432732	NT	EG:114D9.2 PROTEIN.;
11089	24059	37583	2.78	1.0E-110	Y12337.1	NT	QV2-L T0053-020400-119-e04 L T0053 Homo sapiens cDNA
11314	24264	37791	3.18	1.0E-110	BE734357.1	EST_HUMAN	Homo sapiens galectinase 2 (GALK2), mRNA
11314	24264	37792	3.18	1.0E-110	BE734357.1	EST_HUMAN	H. sapiens mRNA for myotonic dystrophy protein kinase like protein
11770	23926	37445	2.49	1.0E-110	AA446528.1	EST_HUMAN	6071566504F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
12210	25051		5.81	1.0E-110	BE897218.1	EST_HUMAN	6071566504F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
12339	25137		9.66	1.0E-110	AW062258.1	EST_HUMAN	6071566504F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
12578	25288		1.72	1.0E-110	AB011396.1	NT	zw67g02.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781288 5' similar to TR:G1145816
12708	25913		2.95	1.0E-110	BF364546.1	EST_HUMAN	G1145816 FKBP94;
12887	15090		1.94	1.0E-110	BF080898.1	EST_HUMAN	PM3-NIN1082-140900-008-f12 NN1082 Homo sapiens cDNA
176	13277		12.39	1.0E-111	U43701.1	NT	UHL-BM-acc-b-05-0-UI.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085794 3'
736	13797		3.39	1.0E-111	BF035327.1	EST_HUMAN	Human ribosomal protein L23a mRNA, complete cds
745	13806	26746	5.88	1.0E-111	8393092	NT	6071458531F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3862086 5'
927	13960	26834	3.63	1.0E-111	M25142.1	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
2260	15294	28290	1.53	1.0E-111	AF036128.1	NT	Homo sapiens alpha-myosin heavy chain (MYH6) gene, exons 32 to 34
4357	17394	30266	4.65	1.0E-111	K02268.1	NT	Homo sapiens collagen type IX alpha 1 chain (COL9A1) gene, exons 29, 30, 31, and 32
5283	18288	31160	0.72	1.0E-111	AB035386.1	NT	Human enkephalin B (enkeB) gene, exon 4 and 3' flank and complete cds
							Homo sapiens mRNA for neuronin I-alpha protein, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5553	18850	31593	0.88	1.0E-111	AA151017.1	EST_HUMAN	z47607.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5553	18850	31594	0.88	1.0E-111	AA151017.1	EST_HUMAN	z47607.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5714	18808	31886	0.89	1.0E-111	BE867809.1	EST_HUMAN	601443980.F1 NIH_MGC 85 Homo sapiens cDNA clone IMAGE:3847655 5'
5937	18927	32111	0.49	1.0E-111	U18988.1	NT	Human two-handed zinc finger protein ZEB mRNA, partial cds
6148	19223	32453	1.5	1.0E-111	A1344879.1	EST_HUMAN	qp08g12.x1 NCI_CGAP_Kd45 Homo sapiens cDNA clone IMAGE:1617674 3' similar to gb:M29883 RAS-RELATED PROTEIN RAL-A (HUMAN);
6937	18880	33185	0.95	1.0E-111	AL040782.1	EST_HUMAN	DKFZp434G1815.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G1815 5'
6978	20201	33531	1.3	1.0E-111	AW294848.1	EST_HUMAN	U14-BW0-af-4-03-0-UI.s1 NCI_CGAP_Sub88 Homo sapiens cDNA clone IMAGE:2729525 3'
7405	20373	33724	0.62	1.0E-111	AW983165.1	EST_HUMAN	RC2-BN0033-160200-013-505 BN0033 Homo sapiens cDNA
7680	20638	34000	2.67	1.0E-111	BF368228.1	EST_HUMAN	IL2-NT101-280700-114-E03 NT101 Homo sapiens cDNA
7772	20725	34097	0.51	1.0E-111	9861233	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant A, mRNA
7779	20732	34104	0.58	1.0E-111	AT781228.1	EST_HUMAN	wf68001.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2388465 3' similar to gb:J04813 CYTOCHROME P450 IIA5 (HUMAN);
7873	20817	34195	0.8	1.0E-111	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p-44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
8067	21004	34402	1.52	1.0E-111	AA133914.1	EST_HUMAN	z462c12.1 Stratiens muscla 837209 Homo sapiens cDNA clone IMAGE:582774 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8431	21400	34812	0.82	1.0E-111	AA278868.1	EST_HUMAN	z578g03.1 NCI_CGAP_G031 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1258410
8431	21400	34813	0.82	1.0E-111	AA278868.1	EST_HUMAN	G1258410 11-ZINC-FINGER TRANSCRIPTION FACTOR.;
8530	21408	34914	0.55	1.0E-111	11431896	NT	z578g03.1 NCI_CGAP_G031 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1258410
8583	21551	34989	3.24	1.0E-111	U98633.1	NT	Human sapiens protein x0001 (LOC51185), mRNA
9027	21893	35413	0.77	1.0E-111	11420518	NT	Human beta4-integrin (ITGB4) gene, exon 13
9128	22094	35522	0.83	1.0E-111	AK024453.1	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
9160	22126		26.95	1.0E-111	BF214902.1	EST_HUMAN	Homo sapiens mRNA for FLJ00045 protein, partial cds
9236	22202	35632	15.22	1.0E-111	X17033.1	NT	601847132.F1 NIH_MGC 55 Homo sapiens cDNA clone IMAGE:4078303 5'
9236	22202	35633	15.22	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
9443	22407	35844	2.88	1.0E-111	AF091385.1	NT	Human mRNA for integrin alpha-2 subunit
9672	22625	36079	0.46	1.0E-111	BF333210.1	EST_HUMAN	Homo sapiens T10 isoform mRNA, complete cds
							QV2-BT0817-270900-398-e06 BT0817 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10512	23494	36832	1.86	1.0E-111	AA504180.1	EST_HUMAN	es58g02.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:826170 3' similar to gb:U08235
10540	23492		1.89	1.0E-111	D10083.1	NT	VACUOLAR ATP SYNTHASE CATALYTIC SUBUNIT A, UBIQUITOUS (HUMAN);
10835	23557	37057	6.39	1.0E-111	AA131248.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
11110	24070	37892	3.4	1.0E-111	AW286467.1	EST_HUMAN	z31f01.f1 Soares_pregnant_uterus_NHhPU Homo sapiens cDNA clone IMAGE:503545 5'
11288	24238		2.64	1.0E-111	AW374340.1	EST_HUMAN	UHH-BW0-eig-d-07-0-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2730278 3'
11383	24330	37859	2.98	1.0E-111	U68159.1	NT	IL0-CT0031-Z21089-113-408 CT0031 Homo sapiens cDNA
12168	25018	38618	4.77	1.0E-111	11417801	NT	Human thrombopoietin receptor (MPL) gene, exons 1,2,3,4,5 and 6
12955	18298	31180	1.75	1.0E-111	AB035358.1	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
610	13675	26580	0.9	1.0E-112	4601854	NT	Homo sapiens mRNA for neuradin 1-alpha protein, complete cds
612	13677	26592	5.51	1.0E-112	U29103.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
612	13677	26593	5.51	1.0E-112	U29103.1	NT	Human sterologenic acute regulatory protein (STAR) gene, exon 5
633	13698	26818	1.91	1.0E-112	BF508039.1	EST_HUMAN	Human sterologenic acute regulatory protein (STAR) gene, exon 5
633	13698	26819	1.91	1.0E-112	BF508039.1	EST_HUMAN	UHH-B14-ect-g-04-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1003	14054	27008	1.21	1.0E-112	AF157823.1	NT	UHH-B14-ect-g-04-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1063	14109	27058	1.85	1.0E-112	P52742	SWISSPROT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1692	14722	27703	3.1	1.0E-112	7682125	NT	ZINC FINGER PROTEIN 135
1692	14722	27704	3.1	1.0E-112	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2207	15222	28242	1.08	1.0E-112	A1766925.1	EST_HUMAN	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2515	15518	28541	1.34	1.0E-112	BE86889.1	EST_HUMAN	w60f06.x1 NCI_CGAP_K412 Homo sapiens cDNA clone IMAGE:2400611 3'
3094	16152		3.53	1.0E-112	4504116	NT	601442674F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3948958 5'
3371	16421	29346	1.07	1.0E-112	A1826511.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3898	16838	29849	0.69	1.0E-112	BE076073.1	EST_HUMAN	wk45b12.x1 NCI_CGAP_P722 Homo sapiens cDNA clone IMAGE:2418335 3' similar to gb:M81650_rna1
4634	17655	30542	0.79	1.0E-112	4504116	NT	SEMN0GELIN 1 PROTEIN PRECURSOR (HUMAN);
4784	17803	30694	5.01	1.0E-112	AB037832.1	NT	MR2-BT0590-090300-113-408 BT0590 Homo sapiens cDNA
4784	17803	30695	5.01	1.0E-112	AB037832.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5750	18844	32027	38.43	1.0E-112	N46046.1	EST_HUMAN	Homo sapiens mRNA for KIAA1411 protein, partial cds
6185	19269	32504	1.28	1.0E-112	AF149773.1	NT	y95d07.r1 Soares_melanocyte_2NblHM Homo sapiens cDNA clone IMAGE:273229 5'
6268	19341	32573	0.89	1.0E-112	AW502497.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6268	19341	32574	0.89	1.0E-112	AW502497.1	EST_HUMAN	UHF-BR0p-ajs-g-08-0-U1.f1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076868 5'
6378	19446	32687	0.9	1.0E-112	BE741698.1	EST_HUMAN	UHF-BR0p-ajs-g-08-0-U1.f1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076868 5'
6903	19692	32835	0.83	1.0E-112	BF672815.1	EST_HUMAN	601594717F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948557 5'
6782	19846	33130	0.74	1.0E-112	BE273103.1	EST_HUMAN	602162849F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283420 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6782	19846	33131	0.74	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506508 5'
7018	20144	33491	1.23	1.0E-112	BF574235.1	EST_HUMAN	602131405F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270921 5'
7362	20332	33682	0.66	1.0E-112	AL043289.1	EST_HUMAN	DKFZp434M0523_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434M0523 5'
7559	20522	33879	1.62	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC8A7), mRNA
7559	20522	33880	1.62	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC8A7), mRNA
8535	21503	34921	1.93	1.0E-112	AU118051.1	EST_HUMAN	AU118051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
9309	22274	35705	2.56	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3847285 5'
9309	22274	35706	2.66	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3847285 5'
10253	23176	36865	2.18	1.0E-112	BF111413.1	EST_HUMAN	730907 x1 Soarea_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
11132	24092	37821	2.93	1.0E-112	AW863327.1	EST_HUMAN	TR-09VW35 Q9VW35 C93743 PROTEIN. ;
11296	24246	37772	2.36	1.0E-112	AJ246900.1	NT	MR3-SN0008-100400-103-B12 SN0008 Homo sapiens cDNA
11433	24377	37917	1.7	1.0E-112	BE280479.1	EST_HUMAN	Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1 gene)
11518	24459	38009	3.58	1.0E-112	AW377670.1	EST_HUMAN	601155323F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138989 5'
12095	24966	38563	6.59	1.0E-112	M20707.1	NT	PMO-CT0237-141089-001-f02 CT0237 Homo sapiens cDNA
744	13805	26744	5.37	1.0E-113	AJ365596.1	EST_HUMAN	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
744	13805	26745	5.37	1.0E-113	AJ365596.1	EST_HUMAN	sc85f01 x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
941	13594	26946	5.76	1.0E-113	M11065.1	NT	sc85f01 x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
1543	14576	27548	3.01	1.0E-113	AJ365596.1	EST_HUMAN	Human X-linked phosphoglycerate kinase gene, exon 8
1958	15821	27980	1.28	1.0E-113	AF240775.1	EST_HUMAN	sc85f01 x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
2106	15123	28143	0.99	1.0E-113	BF515218.1	EST_HUMAN	Homo sapiens eIF4E-translator mRNA, complete cds
3147	16204	28118	1.16	1.0E-113	AJ223948.1	NT	UHH-BW1-ant-f-03-O-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082876 3'
5316	25748	31626	1.54	1.0E-113	BE780858.1	EST_HUMAN	Homo sapiens mRNA for putative RNA helicase, 3' end
5570	18667	31626	6.88	1.0E-113	AU127214.1	EST_HUMAN	601489485F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3872638 5'
5916	19002	32193	0.54	1.0E-113	BE789172.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
5916	19002	32194	0.54	1.0E-113	BE789172.1	EST_HUMAN	601476236F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879406 5'
6031	19114	32317	4.18	1.0E-113	AU140291.1	EST_HUMAN	601476236F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879406 5'
6061	19142	32354	0.97	1.0E-113	AF016535.1	EST_HUMAN	AU140291 PLACE2 Homo sapiens cDNA clone PLACE2000274 5'
6188	19263	32499	2.42	1.0E-113	11525737	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetyl-galactosaminyltransferase 8 (GalNAc-6T) (GALNT8), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6280	19352	32587	0.62	1.0E-113	8981249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6280	19352	32588	0.62	1.0E-113	8981249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6449	19514	32764	0.89	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
6449	19514	32765	0.89	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7543	20506	33865	0.72	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
7543	20506	33866	0.72	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
9450	22414	35850	2.83	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
9450	22414	35851	2.83	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
9758	22697		0.7	1.0E-113	BE772967.1	EST_HUMAN	RC1-FT0134-280600-021-d02 FT0134 Homo sapiens cDNA
10190	23115	36589	1.3	1.0E-113	11428387	NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
10290	23215	36599	0.73	1.0E-113	M21535.1	NT	Human erg protein (ets-related gene) mRNA, complete cds
10410	23332	36817	0.77	1.0E-113	5483987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10410	23332	36818	0.77	1.0E-113	5483987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
11457	24400	37948	1.51	1.0E-113	AW500519.1	EST_HUMAN	UH-HF-BNO-ek-b-12-0-J11 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077326 5'
11466	24408	37958	3	1.0E-113	AW630291.1	EST_HUMAN	hh81a03.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2869176 5' similar to TR-O60327 O60327 KIAA0584 PROTEIN;
11466	24408	37967	3	1.0E-113	AW630291.1	EST_HUMAN	hh81a03.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2869176 5' similar to TR-O60327 O60327 KIAA0584 PROTEIN;
11592	24530	38087	2.94	1.0E-113	BE282988.1	EST_HUMAN	601105529F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:2888368 5'
11826	24709	38282	3.1	1.0E-113	AA680720.1	EST_HUMAN	nc80b03.l1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797089 5' similar to SW:FEN1_HUMAN
11826	24709	38283	3.1	1.0E-113	AA680720.1	EST_HUMAN	nc80b03.l1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797089 5' similar to SW:FEN1_HUMAN
60	13179	26082	0.65	1.0E-114	Y17161.2	NT	P39748 FLAP ENDONUCLEASE-1;
60	13179	26083	0.65	1.0E-114	Y17161.2	NT	nc80b03.l1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797089 5' similar to SW:FEN1_HUMAN
60	13179	26084	0.65	1.0E-114	Y17161.2	NT	P39748 FLAP ENDONUCLEASE-1;
							Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
							Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
							Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
646	13712	26834	5.97	1.0E-114	T70551.1	EST_HUMAN	y416c01.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:108288 3' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN); contains Alu repetitive element;
1072	14117	27068	1.78	1.0E-114	8923087	NT	Homo sapiens hypodermal protein FLJ20080 (FLJ20080), mRNA
1316	14351	27319	6	1.0E-114	7667629	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1848	14680	27653	1.79	1.0E-114	6631084	NT	Homo sapiens mitochondrion maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1681	14713	27691	5.92	1.0E-114	6879073	NT	Homo sapiens nucleoporin-like protein 1 (NLP_1), mRNA
3148	16205	29119	2.91	1.0E-114	X04088.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
3187	16242	29160	1.26	1.0E-114	BF206374.1	EST_HUMAN	601869332F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
4044	17082	29880	1.26	1.0E-114	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
4417	17444	30335	0.78	1.0E-114	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
5228	18236	31110	0.99	1.0E-114	AA194468.1	EST_HUMAN	z05a05.f1 Stragene muscle 837209 Homo sapiens cDNA clone IMAGE:628832 5' similar to contains MER22.13 MER22 repetitive element;
5474	18575	31483	1.47	1.0E-114	4506880	NT	Homo sapiens sem domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5474	18575	31484	1.47	1.0E-114	4506880	NT	Homo sapiens sem domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5676	18771	31943	1	1.0E-114	8257201	NT	Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 2, mRNA
6354	19423	32565	0.51	1.0E-114	Z26298.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 20
7191	18422	31224	0.54	1.0E-114	4759163	NT	Homo sapiens sper/osteonectin, cwc and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
7280	20014	33770	1.01	1.0E-114	AB041533.1	NT	Homo sapiens HCMOGT-1 mRNA for sperm antigen, complete cds
7460	20416	33770	1.08	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7450	20416	33771	1.08	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7489	20464	33824	5.65	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7489	20464	33825	5.65	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
8223	21192	34600	1.87	1.0E-114	4557600	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
8507	21476	34888	1.65	1.0E-114	A1963139.1	EST_HUMAN	qy68d06.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2017163 3'
8507	21476	34889	1.65	1.0E-114	A1963139.1	EST_HUMAN	qy68d06.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2017163 3'
8049	22015	35439	3.38	1.0E-114	U69041.1	NT	Human neural cell adhesion molecule CD58 mRNA, complete cds
9119	22085	35514	5.81	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9119	22086	35515	5.81	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9353	22318	35744	0.42	1.0E-114	AB046784.1	NT	Homo sapiens mRNA for KIAA1564 protein, partial cds
9537	22500	35948	0.61	1.0E-114	BF109832.1	EST_HUMAN	769g12.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3528847 3' similar to TR:Q8UJH6 Q8UJH6 TRANSMEMBRANE PROTEIN 2.;
9769	22710		14.09	1.0E-114	AW327456.1	EST_HUMAN	dq03f05.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2846744 5'
9818	21140	34546	3.34	1.0E-114	AF077754.1	NT	Homo sapiens tyrosine kinase pp60c-src (SRC) gene, exon 12 and partial cds
9906	22858		1.15	1.0E-114	M13536.1	NT	Human ceruloplasmin mRNA
10498	23420	36919	0.95	1.0E-114	BE870004.1	EST_HUMAN	601449752F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3853500 5'
10522	23444	36942	1.42	1.0E-114	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10907	23827	37340	0.87	1.0E-114	BE171984.1	EST_HUMAN	MR0-HT0559-250200-002-d07 HT0559 Homo sapiens cDNA
11140	24100						ba73q12.Y1 NIH_MGC 20 Homo sapiens cDNA clone IMAGE:2906088 5' similar to gb:X17206.40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element complete (MOUSE);
11524	24465	39018	15.04	1.0E-114	BE302888.1	EST_HUMAN	
11524	24465	38019	3.01	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cDNA Homo sapiens cDNA clone cdABA08 5'
12619	25674		3.01	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cDNA Homo sapiens cDNA clone cdABA08 5'
12659	25464	31725	2.9	1.0E-114	11418041	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
12859	25464	31726	3.55	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
24	13144	26044	3.55	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
190	13235	26165	2.83	1.0E-115	4758111	NT	Homo sapiens HLA-B associated transcript-1 (D6S81E) mRNA
134	13239		2.37	1.0E-115	4505838	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
292	13388	26313	3.36	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
537	13608	26528	5.22	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-158-b08 UM0094 Homo sapiens cDNA
637	13608	26527	1.12	1.0E-115	AB39208.1	EST_HUMAN	qi0801.x1 NCI_CGAP GC4 Homo sapiens cDNA clone IMAGE:1948809 3' similar to TR:000536 000536 TTF-1 INTERACTING PEPTIDE 5;
787	13848	26782	1.12	1.0E-115	AB39208.1	EST_HUMAN	qi0801.x1 NCI_CGAP GC4 Homo sapiens cDNA clone IMAGE:1948809 3' similar to TR:000536 000536 TTF-1 INTERACTING PEPTIDE 6;
787	13848	26783	0.78	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
789	13848	26785	0.78	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
1561	14593	27566	68.69	1.0E-115	4603794	NT	Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA
1561	14593	27567	1.46	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1858	14884	27881	1.46	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
2863	15923		1.24	1.0E-115	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3132	16189	28069	1.7	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-158-b08 UM0094 Homo sapiens cDNA
3132	16189	29100	2.74	1.0E-115	AJ245822.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3486	16532	29457	2.74	1.0E-115	AJ245822.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
4072	17108	30002	2.07	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
4295	17324	30204	4.75	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4429	17458	30347	0.88	1.0E-115	AL137163.1	NT	Novel human gene mapping to chromosome X
4485	17491	30378	3.89	1.0E-115	6812659	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4702	17723	30616	3.73	1.0E-115	4758278	NT	Homo sapiens EphA4 (EPHA4) mRNA
4702	17723	30617	2.63	1.0E-115	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4702	17723	30617	2.53	1.0E-115	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4943	17959	30849	2.57	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4943	17959	30850	2.57	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
5420	18523	31401	9.81	1.0E-115	AW970335.1	EST_HUMAN	EST382416 MAGE resequencing, MAGK Homo sapiens cDNA
5498	18598	31510	1.08	1.0E-115	BF665367.1	EST_HUMAN	602118346F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276738 5'
5620	18716	31875	1.88	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5620	18716	31876	1.68	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5775	18867	32049	1.1	1.0E-115	A1928789.1	EST_HUMAN	au64g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2618568 3' similar to gb:L07807 DYNAMIN-1 (HUMAN);
5775	18867	32050	1.1	1.0E-115	A1928789.1	EST_HUMAN	au64g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2618568 3' similar to gb:L07807 DYNAMIN-1 (HUMAN);
6391	19459	32704	0.68	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6391	19459	32705	0.68	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6535	19598	32861	19.47	1.0E-115	11426038	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63436), mRNA
6676	19735	33010	1.82	1.0E-115	7601883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6676	19735	33011	1.82	1.0E-115	7601883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
7120	20054	33358	0.57	1.0E-115	T86774.1	EST_HUMAN	y88608.L1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115085 5' similar to SP-DPOG_YEAST P18801 DNA POLYMERASE GAMMA;
7493	20458	33816	1.22	1.0E-115	A1076598.1	EST_HUMAN	alpha31a06.x1 Soares fetal fetus_Nb2HF8 9w Homo sapiens cDNA clone IMAGE:1676814 3'
7493	20458	33817	1.22	1.0E-115	A1076598.1	EST_HUMAN	alpha31a06.x1 Soares fetal fetus_Nb2HF8 9w Homo sapiens cDNA clone IMAGE:1676814 3'
7638	20598	33982	7.12	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0885 protein, partial cds
8500	21468	34884	11.55	1.0E-115	BE830187.1	EST_HUMAN	RC8-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8500	21468	34885	11.55	1.0E-115	BE830187.1	EST_HUMAN	RC8-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
9184	22130	35557	4.68	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
10133	23059	36536	0.64	1.0E-115	BF382029.1	EST_HUMAN	601816352F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4050108 5'
10358	23282	36758	1.74	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10358	23282	36759	1.74	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10887	23807	37312	1.02	1.0E-115	A1221678.1	EST_HUMAN	qg86e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10887	23807	37313	1.02	1.0E-115	A1221678.1	EST_HUMAN	qg86e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10894	23814	37321	0.7	1.0E-115	A1524687.1	EST_HUMAN	th12a07.x1 NC1_CGAP_CL1.1 Homo sapiens cDNA clone IMAGE:2118036 3' similar to TR:O16128 O16129 PHENYLALANYL TRNA SYNTHETASE;
10820	23840	37356	0.73	1.0E-115	BE866285.1	EST_HUMAN	601508879F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911610 5'
11072	24034	37558	3.4	1.0E-115	AW571544.1	EST_HUMAN	xx3208.x1 NC1_CGAP_U1 Homo sapiens cDNA clone IMAGE:2689239 3' similar to SW:CAYP_CANFA P10463 CALYPTOSINE;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11589	24527	38083	2.1	1.0E-115	BE045880.1	EST_HUMAN	h954c10.x1 NCI_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG;
11589	24527	38084	2.1	1.0E-115	BE045880.1	EST_HUMAN	h954c10.x1 NCI_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG;
11728	24612	38189	2.06	1.0E-115	4502528	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
12191	25098		1.52	1.0E-115	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
574	13643	26557	1.02	1.0E-116	BE275502.1	EST_HUMAN	601121347F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2988875 5'
801	13960	26807	2.44	1.0E-116	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
860	13916		0.68	1.0E-116	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
2013	15034	28044	2.89	1.0E-116	5174478	NT	Homo sapiens perlecanin (PCNT) mRNA
2013	15034	28045	2.89	1.0E-116	5174478	NT	Homo sapiens perlecanin (PCNT) mRNA
2316	15327	28350	1.86	1.0E-116	5453941	NT	Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2348	15357		1.68	1.0E-116	U78308.1	NT	Human ciliary receptor cilia17-201-1 (OR17-201-1) gene, ciliary receptor cilia17-32 (OR17-32) gene and ciliary receptor pseudo_cilia17-01 (OR17-01) pseudogene, complete cds
2462	15468	28489	2.89	1.0E-116	AB018333.1	NT	Homo sapiens mRNA for KIAA0780 protein, partial cds
2744	15829	28754	3.32	1.0E-116	BE889256.1	EST_HUMAN	601613337F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914600 5'
3180	16235		0.95	1.0E-116	T07515.1	EST_HUMAN	EST05405 Fetal brain, Stratagene (cat#836206) Homo sapiens cDNA clone HFBK28 similar to EST containing L1 repeat
3189	16244	29161	5.44	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3189	16244	29162	5.44	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4405	17433	30318	2.38	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4892	17909	30788	2.03	1.0E-116	AB07096.1	EST_HUMAN	PM-BT135-070469-016 BT135 Homo sapiens cDNA
5230	18238	31111	0.92	1.0E-116	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
5351	18458	31326	0.92	1.0E-116	AI302062.1	EST_HUMAN	q118d04.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1898895 3' similar to contains element MER25 repetitive element;
6090	19169	32384	2.18	1.0E-116	W42822.1	EST_HUMAN	zc2407.r1 Scores_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR;
6336	19405	32645	1.8	1.0E-116	AB046958.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
6336	19405	32646	1.8	1.0E-116	AB046958.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
6408	19478	32723	0.95	1.0E-116	BE408097.1	EST_HUMAN	601302281F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636784 5'
6649	19707	32982	0.73	1.0E-116	5728867	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6649	19707	32983	0.73	1.0E-116	5728867	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6683	19720		2.06	1.0E-116	BE156133.1	EST_HUMAN	MF2-HT0379-210200-102-b04 HT0379 Homo sapiens cDNA
7130	20106	33417	1.59	1.0E-116	C02944.1	EST_HUMAN	C02944 Human heart cDNA (Ynakamura) Homo sapiens cDNA clone 3NH00567
7410	20377	33728	7.19	1.0E-116	AV716314.1	EST_HUMAN	AV716314 DC8 Homo sapiens cDNA clone DC8B0306 5'
8712	21680	35106	1.32	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8712	21680	35107	1.32	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8824	21791	35213	1.04	1.0E-116	AI904151.1	EST_HUMAN	GM-BT043-090298-075 BT043 Homo sapiens cDNA
9280	22256	35688	1.39	1.0E-116	BE565607.1	EST_HUMAN	601338268FT NIH_MGC 63 Homo sapiens cDNA clone IMAGE:3680680 5'
9455	22419	35857	2.9	1.0E-116	AI216352.1	EST_HUMAN	qf08c09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gp-X53741_maf1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
10033	22960	36428	1.49	1.0E-116	11418848	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2), mRNA
10633	23555	37055	0.71	1.0E-116	ALZ77441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10633	23555	37056	0.71	1.0E-116	ALZ77441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10713	23635	37128	0.91	1.0E-116	BE169913.1	EST_HUMAN	QV4-HT0401-281289-063-c09 HT0401 Homo sapiens cDNA
11046	24010	37536	2.44	1.0E-116	BF3353849.1	EST_HUMAN	CM2-CT0482-300800-349-e08 CT0482 Homo sapiens cDNA
11470	24413	37982	2.63	1.0E-116	AI967140.1	EST_HUMAN	qq41e04.x1 Soares_NIH-MPU_S1 Homo sapiens cDNA clone IMAGE:1935102 3' similar to WP-B0496.7
12804	25940		1.86	1.0E-116	AL134889.1	EST_HUMAN	CE01765 ;
560	13630	26547	1.04	1.0E-117	4826638	NT	DKFZp762L1110_r1 762 (synonym: hmd2) Homo sapiens cDNA clone DKFZp762L1110 5'
1079	15858	27078	0.86	1.0E-117	AF124363.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1229	14287	27224	2.2	1.0E-117	AF284750.1	NT	Mus musculus fragile-X-related protein 1 (Fxr1h) gene, exons 13a through 15
1848	14874	27870	2.04	1.0E-117	MT9816.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2221	15235	28259	1.26	1.0E-117	AW957699.1	EST_HUMAN	Human apolipoprotein B-100 (apoB) gene, exon 10
3281	16335	29255	1.51	1.0E-117	AA978114.1	EST_HUMAN	EST369769 MAGE resequences, MAGE Homo sapiens cDNA
4016	17055	29958	5.89	1.0E-117	AA316723.1	EST_HUMAN	qp32e11.at Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4371	17398	30278	2.1	1.0E-117	8666664	NT	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
4608	17629	30521	1.95	1.0E-117	AL042120.1	EST_HUMAN	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4755	17775	30670	1.19	1.0E-117	X89670.1	NT	DKFZp434G1120_r1 434 (synonym: hhas3) Homo sapiens cDNA clone DKFZp434G1120 5'
4755	17775	30671	1.19	1.0E-117	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
4847	17864	30757	10.31	1.0E-117	AF134304.2	NT	H. sapiens mRNA for TPCR16 protein
4847	17864	30758	10.31	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4977	17992	30881	4.01	1.0E-117	AB020673.1	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
5421	18524	31402	3.29	1.0E-117	BE730508.1	EST_HUMAN	Homo sapiens mRNA for KIAA0868 protein, complete cds
7148	18380	31269	0.53	1.0E-117	AA323348.1	EST_HUMAN	601662657F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3832214 5'
							EST28111 Cerebellum II Homo sapiens cDNA 5' end similar to similar to zinc finger domain

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7683	20641	34004	4.55	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7683	20641	34005	4.55	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7785	20747	34121	3.71	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7785	20747	34122	3.71	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
8311	21280	34691	3.79	1.0E-117	AB50145.1	EST_HUMAN	wp86b07.x1 NC1_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2468628 3' similar to TR:O75065
8654	21622	35042	1.01	1.0E-117	10834889	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8654	21622	35043	1.01	1.0E-117	10834889	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8764	21722	35144	0.63	1.0E-117	AB04151.1	EST_HUMAN	CM-BT043-080289-075 BT043 Homo sapiens cDNA
8764	21722	35145	0.63	1.0E-117	AB04151.1	EST_HUMAN	CM-BT043-080289-075 BT043 Homo sapiens cDNA
9654	22587	36046	1.61	1.0E-117	D16524.1	NT	Human gene for very low density lipoprotein receptor, exon 11
10145	23071	36548	1.71	1.0E-117	BE733922.1	EST_HUMAN	601569317F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843748 5'
10308	25701	36713	0.64	1.0E-117	AF080033.1	NT	Homo sapiens gamma-aminobutyric acid type B receptor 2 (GABABR2) mRNA, complete cds
10834	23854	37370	1.96	1.0E-117	11420222	NT	Homo sapiens Drosophila Kalch like protein (DKELCHL), mRNA
11207	24161	37691	2.17	1.0E-117	D83776.1	NT	Human mRNA for KIAA0191 gene, partial cds
11375	24322	37850	1.96	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11375	24322	37851	1.96	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11604	24542	38101	2.72	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11604	24542	38102	2.72	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11722	24608		34.45	1.0E-117	BE268958.1	EST_HUMAN	601186203F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3544286 5'
11821	24802	38393	1.76	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11821	24802	38394	1.76	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
12429	25911		1.39	1.0E-117	AF224699.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
71	13189	28109	2.9	1.0E-118	AF161500.1	NT	Homo sapiens HSPG151 mRNA, complete cds
96	13211	28135	1.27	1.0E-118	AL045854.1	EST_HUMAN	DKFZp434I056_r1 434 (synonym: hbae3) Homo sapiens cDNA clone DKFZp434I056 5'
518	13569	28509	4.46	1.0E-118	7657016	NT	Homo sapiens hypothetical protein (D1328E18 C1.1), mRNA
815	15954	28623	1.66	1.0E-118	5174980	NT	Homo sapiens sine oculis homeobox (Drosophila) homolog 1 (SIX1) mRNA
2242	15256	28280	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2242	15256	28281	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2242	15256	28282	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2337	15348		1.55	1.0E-118	AW951728.1	EST_HUMAN	EST363789 IMAGE resequences, MAC8 Homo sapiens cDNA
2750	15743	28760	2.48	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
2750	15743	28761	2.48	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3121	16178		3.87	1.0E-118	Y13832.1	NT	Homo sapiens PRKY exon 7
3210	16265	29187	4.61	1.0E-118	A1947694.1	EST_HUMAN	qp01f05.x1 NCL_OGAP_Kd5 Homo sapiens cDNA clone IMAGE:1916769 3'
3210	16265	29188	4.61	1.0E-118	A1947694.1	EST_HUMAN	qp01f05.x1 NCL_OGAP_Kd5 Homo sapiens cDNA clone IMAGE:1916769 3'
3970	17010	28924	0.98	1.0E-118	AB024469.1	NT	Pongo pygmaeus DNA, similar to pol gene of HERV-W and MSRV, isolate ORW3-3
4116	17149	30041	5.07	1.0E-118	D23690.1	NT	Human mRNA for ribosomal protein, complete cds
5497	18597	31508	1.86	1.0E-118	AF142824.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5497	18597	31509	1.86	1.0E-118	AF142824.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5713	18807	31894	0.66	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5713	18807	31895	0.66	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5800	18892	32074	0.58	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5800	18892	32075	0.58	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5865	18954	32141	1.44	1.0E-118	M55109.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 4
5962	19047	32247	0.95	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
5962	19047	32248	0.95	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6053	19134	32343	1.81	1.0E-118	11420764	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6849	19902	33198	1.79	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6849	19902	33197	1.79	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7304	20275	33611	1.07	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434O0127 6'
7304	20275	33612	1.07	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434O0127 5'
7558	20803	34179	5.13	1.0E-118	11431060	NT	Homo sapiens chromosome 2 open reading frame 3 (C2ORF3), mRNA
7872	20816	34194	0.72	1.0E-118	L46590.1	NT	Homo sapiens very long chain acyl-CoA dehydrogenase gene, exons 1-20, complete cds
8305	21274	34695	2.41	1.0E-118	BE781223.1	EST_HUMAN	601489159F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872247 5'
8728	21694	35119	7.01	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-080200-097-H03 BT0263 Homo sapiens cDNA
8728	21694	35120	7.01	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-080200-097-H03 BT0263 Homo sapiens cDNA
8732	21700	35125	1.39	1.0E-118	AA143024.1	EST_HUMAN	z98007.r1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8732	21700	35126	1.39	1.0E-118	AA143024.1	EST_HUMAN	z98007.r1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8732	21700	35128	1.39	1.0E-118	AB002381.1	EST_HUMAN	Human mRNA for KIAA0383 gene, partial cds
9021	21987	35408	1.02	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
9021	21987	35409	1.02	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
9071	22037	35460	1.32	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
9071	22037	35461	1.32	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
9390	22355	36789	5.12	1.0E-118	BE263134.1	EST_HUMAN	601144863F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160502 5'
9421	22386	36825	0.53	1.0E-118	AL048474.2	EST_HUMAN	DKFZp586K1824_r1 588 (synonym: hube1) Homo sapiens cDNA clone DKFZp586K1824
9951	22878	36341	2.29	1.0E-118	7667016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
10698	23620	37115	0.46	1.0E-118	BE736213.1	EST_HUMAN	601307149F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3641603 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10698	23620	37116	0.46	1.0E-118	BE738213.1	EST_HUMAN	601307146F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3841603 5'
10741	23683	37168	2.31	1.0E-118	BF165407.1	EST_HUMAN	7n17e09.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3584785 3' similar to SW:ZFP3A_HUMAN
10858	23819	37328	0.54	1.0E-118	AW286351.1	EST_HUMAN	P21784 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR ;
11607	24545	38108	6.48	1.0E-118	AA315007.1	EST_HUMAN	UJ-HBW0-ab-e-07-0-UJ.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729772 3'
11884	24765	38351	1.9	1.0E-118	BE908678.1	EST_HUMAN	EST186814 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
11884	24765	38352	1.9	1.0E-118	BE908678.1	EST_HUMAN	601499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11887	24768	38355	1.51	1.0E-118	BF083687.1	EST_HUMAN	601499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11887	24768	38356	1.51	1.0E-118	BF083687.1	EST_HUMAN	QV0-UJM0091-120900-385-b12 UM0091 Homo sapiens cDNA
12038	24911		1.58	1.0E-118		NT	QV0-UJM0091-120900-385-b12 UM0091 Homo sapiens cDNA
1038	15857	27034	1.75	1.0E-119	7705607	NT	Homo sapiens flap structure-specific endonuclease 1 (FEN1), mRNA
1860	14973	27972	2.88	1.0E-119	AB023147.1	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
3119	19178	28087	0.98	1.0E-119	8822205	NT	Homo sapiens mRNA for KIAA0830 protein, partial cds
3254	18308		0.88	1.0E-119	AA916780.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
3975	17015	28928	1.12	1.0E-119	4504118	NT	on10b05.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP:E04F6.2
5410	18513	31381	2.79	1.0E-119	AU133399.1	EST_HUMAN	CE01214 ;
5423	18526	31404	14.88	1.0E-119	M89914.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5428	18531	31411	2.88	1.0E-119	BE939121.1	EST_HUMAN	AU133399 NT2RP4 Homo sapiens cDNA clone NT2RP4001991 5'
5508	18608	31539	1.55	1.0E-119	AV683731.1	EST_HUMAN	Human neurofibromin (NF1) gene, complete cds
5671	18768	31837	0.88	1.0E-119	AL134903.1	EST_HUMAN	RC1-NN0073-250800-018-g06 NN0073 Homo sapiens cDNA
5671	18768	31838	0.88	1.0E-119	AL134903.1	EST_HUMAN	AV683731 GK Homo sapiens cDNA clone GKCDHB03 5'
6250	19323	32553	7.38	1.0E-119	AF150703.1	EST_HUMAN	DKFZp762M0710_r1 762 (synonym: hms2) Homo sapiens cDNA clone DKFZp762M0710 5'
6415	19483	32730	0.89	1.0E-119	AF315683.1	NT	DKFZp762M0710_r1 762 (synonym: hms2) Homo sapiens cDNA clone DKFZp762M0710 5'
6415	19483	32731	0.89	1.0E-119	AF315683.1	NT	qb77c09.x1 Soares_fetal_heart_Nb-H19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to
6465	19530	32778	1	1.0E-119	AK476732.1	EST_HUMAN	SW_K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10 ;
6604	19683	32836	2.67	1.0E-119	X06282.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6616	19674	32952	4.98	1.0E-119	AW974183.1	EST_HUMAN	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
7840	20600	33864	1.3	1.0E-119	BE786614.1	EST_HUMAN	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
9009	21975	35395	1.15	1.0E-119	BE616150.1	EST_HUMAN	hm23f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157451 3'
10113	23039	36519	0.5	1.0E-119	11545921	NT	Human c-fos/tyr prob-oncogene
10287	23192	36879	1.1	1.0E-119	11036843	NT	EST386288 MAGE resequences, MAGM Homo sapiens cDNA
							601582005F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'
							601280594F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622528 5'
							Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
							Homo sapiens KIAA0477 gene product (KIAA0477), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10808	23530	37026	5.31	1.0E-119	AA468124.1	EST_HUMAN	ss3205.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
10870	23790	37280	1.12	1.0E-119	AJ287701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10911	23831	37344	0.73	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10208 (FLJ10208), mRNA
10911	23831	37345	0.73	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10208 (FLJ10208), mRNA
10985	23905	37419	0.79	1.0E-119	AB032281.1	NT	Homo sapiens Scd mRNA for stearyl-CoA desaturase, complete cds
11394	24340	37870	1.86	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
11394	24340	37871	1.86	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
11835	24476		13.43	1.0E-119	BF569571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
12486	25901		3.21	1.0E-119	AW847619.1	EST_HUMAN	RC3-CT0212-240888-011-403 CT0212 Homo sapiens cDNA
301	13395	26322	0.69	1.0E-120	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
1042	14088	27040	1.6	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1042	14088	27041	1.6	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1422	14455	27428	2.56	1.0E-120	N44873.1	EST_HUMAN	yy40g12.1 Soares melanocyte 2NBM-Homo sapiens cDNA clone IMAGE:273768 5'
1605	14637	27614	2.5	1.0E-120	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S82 precursor, mRNA, complete cds
1823	14850	27844	1.4	1.0E-120	4557260	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2834	15537	28558	1.08	1.0E-120	4755124	NT	Homo sapiens aquaporin 4 (AQP4), splice variant b, mRNA
3318	13395	28322	1.34	1.0E-120	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
4385	17413	30267	1.81	1.0E-120	AF050490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4385	17413	30288	1.81	1.0E-120	AF050490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4691	17712	30606	2.67	1.0E-120	AF008463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds
4691	17712	30607	2.67	1.0E-120	AF008463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds
5825	18915	32098	13.85	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5825	18915	32098	13.85	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
6583	19843	32910	0.63	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
6583	19843	32911	0.63	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
7823	20771	34147	1.84	1.0E-120	D34819.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
8228	21195	34602	1.79	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
8228	21195	34603	1.79	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
8876	21643	35098	2.82	1.0E-120	BF337699.1	EST_HUMAN	602035352F1 NCI_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4183333 5'
8747	21715	35138	0.75	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8747	21715	35139	0.75	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8761	21719	35141	2.5	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8751	21719	35142	2.5	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8788	21763	35185	1.13	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0465 protein, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9859	22795	38247	4.14	1.0E-120	BE382102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3825544 5'
9859	22795	38248	4.14	1.0E-120	BE382102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3825544 5'
10102	23028	38805	3.89	1.0E-120	BF306541.1	EST_HUMAN	601888956F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122878 5'
10118	23044	38824	7.33	1.0E-120	AU133206.1	EST_HUMAN	AU133206 NT2RP4 Homo sapiens cDNA clone NT2RP4001641 5'
10135	23081	38839	0.67	1.0E-120	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10262	23177		0.51	1.0E-120	AB04151.1	EST_HUMAN	CM-BTD43-080289-075 BT043 Homo sapiens cDNA
10438	23368	38846	3.02	1.0E-120	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
11461	24404	37852	18.45	1.0E-120	BE286387.1	EST_HUMAN	601176727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532015 5'
11672	24638	38216	2.5	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_05 Homo sapiens cDNA clone IMAGE:3847281 5'
11672	24638	38217	2.5	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_05 Homo sapiens cDNA clone IMAGE:3847281 5'
11863	24842	38436	2.23	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 6'UTR and exon 1
12632	25318	31785	1.45	1.0E-120	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
74	13191	28113	0.97	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
378	13462	28392	1.92	1.0E-121	AU134683.1	EST_HUMAN	AU134683 PLACE1 Homo sapiens cDNA clone PLACE1000898 5'
725	15848	28721	1.83	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
1983	15004	28007	1.17	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
1983	15004	28008	1.17	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
2112	15129	28149	1.36	1.0E-121	L76831.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
2880	16039	28861	1.69	1.0E-121	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
3097	16154	29087	3.41	1.0E-121	Y18208.1	NT	Homo sapiens HHL3 gene for hair keratin, exons 1 to 9
3097	16154	29088	3.41	1.0E-121	Y18208.1	NT	Homo sapiens HHL3 gene for hair keratin, exons 1 to 9
3547	16593	29518	0.84	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3547	16593	29519	0.84	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3690	16793	29848	8.63	1.0E-121	AF155158.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds
4358	17385	30287	1.39	1.0E-121	AL263294.1	EST_HUMAN	q57b01.x1 NCI_OGAP_Pan1 Homo sapiens cDNA clone IMAGE:2005417 3'
5012	18026	30911	3.4	1.0E-121	X91937.1	NT	H. sapiens ECE-1 gene (exon 17)
5182	18191	31067	0.93	1.0E-121	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
5340	18445	31198	0.86	1.0E-121	BE22250.1	EST_HUMAN	h009008.x1 NCI_OGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166119 3'
5641	18737	31801	0.68	1.0E-121	BE271424.1	EST_HUMAN	601140485F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3048820 5'
7072	20094		0.7	1.0E-121	AL271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
7155	18387	31230	0.82	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN0068-270400-011-02 NN0068 Homo sapiens cDNA
7155	18387	31231	0.82	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN0068-270400-011-02 NN0068 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8269	21238	34849	1.67	1.0E-121	11436217	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA
8273	21242	34853	2.22	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
8273	21242	34854	2.22	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
10217	23142	36630	0.79	1.0E-121	AW583858.1	EST_HUMAN	iso5g05.y1 Human Pancreatic Islets Homo sapiens cDNA 5' similar to TR-O75457 O75457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
10217	23142	36631	0.79	1.0E-121	AW583858.1	EST_HUMAN	iso5g05.y1 Human Pancreatic Islets Homo sapiens cDNA 5' similar to TR-O75457 O75457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
11130	24090	37619	1.87	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA
11138	24096	37625	1.52	1.0E-121	AF084200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E458 allele, complete cds
11315	24265	37793	3.61	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
11340	24290	37815	3.42	1.0E-121	N59624.1	EST_HUMAN	y74601.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:248448 3'
11664	24500	38176	4.22	1.0E-121	AU118320.1	EST_HUMAN	AU118320 HEMBA1 Homo sapiens cDNA clone HEMBA1005538 5'
267	13363	26287	2.23	1.0E-122	AU118320.1	EST_HUMAN	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
336	13425	26347	3.36	1.0E-122	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
358	13445	26372	2.1	1.0E-122	11526178	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
883	13938	26897	3.29	1.0E-122	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
1224	14262	27219	10.66	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
1702	14732	27714	1.02	1.0E-122	AF167708.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1725	14755	27741	1.67	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1725	14755	27742	1.67	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1831	14858	27858	5.11	1.0E-122	BE006024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3898353 5'
2489	15502	28528	8.15	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2489	15502	28529	8.15	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2851	15911	28834	0.91	1.0E-122	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
4883	17900	30789	1.03	1.0E-122	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (precursor, protein S52 precursor, mRNA, complete cds)
5026	18039		1.4	1.0E-122	AW504845.1	EST_HUMAN	UHF-BND-ell-e-03-O-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078948 5'
5843	18739	31904	1.31	1.0E-122	BE268039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
6820	18739	31904	7.59	1.0E-122	BE268039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7422	20389	33740	0.6	1.0E-122	AA888871.1	EST_HUMAN	ak49108.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1409339 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8135	21072	34471	0.51	1.0E-122	AA224258.1	EST_HUMAN	zr15a03.r1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:663438 5' similar to TR:G940370 G940370 1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE;
8135	21072	34472	0.51	1.0E-122	AA224258.1	EST_HUMAN	zr15a03.r1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:663438 5' similar to TR:G940370 G940370 1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE;
8148	22114	35539	0.56	1.0E-122	AJ270801.1	NT	Homo sapiens mRNA for doublesex and mab-3 related transcription factor 1 (DMRT1)
9383	22348	35780	1.17	1.0E-122	11424216	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
9078	22631	36066	0.78	1.0E-122	AJ559618.1	EST_HUMAN	q52h07.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2013767 3' similar to SW:MTA1_HUMAN_Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.1;
9678	22831	36087	0.78	1.0E-122	AJ559618.1	EST_HUMAN	q52h07.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2013767 3' similar to SW:MTA1_HUMAN_Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.1;
10493	23415	36913	0.77	1.0E-122	AL117234.1	NT	Novel human gene mapping to chromosome X, isoform of ddb (proto-oncogene)
11714	24677	38255	6.11	1.0E-122	AB024088.1	NT	Homo sapiens gene for B120, exon 10
12102	24973	38570	1.5	1.0E-122	11434816	NT	Homo sapiens thyroid hormone receptor interactor 11 (TRIP11), mRNA
12228	25063		5.83	1.0E-122	11418187	NT	Homo sapiens phosphomannomutase 1 (PMM1), mRNA
13107	14282	27219	3.03	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
789	13828	26772	1.18	1.0E-123	BF345274.1	EST_HUMAN	602018059F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
789	13828	26773	1.18	1.0E-123	BF345274.1	EST_HUMAN	602018059F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
1016	14083	27014	5.55	1.0E-123	AL163240.2	NT	Homo sapiens chromosome 21 segment HS21C049
1024	14070	27021	2.2	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1243	14278	27241	5.25	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1243	14279	27242	5.25	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1449	14482	27459	83.95	1.0E-123	AJ388941.1	NT	Homo sapiens partial mRNA for immunoglobulin kappa chain variable region (IGVK gene), sample GN02
2109	15128	28145	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2109	15128	28146	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2109	15128	28147	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2323	15334		3.14	1.0E-123	7705962	NT	Homo sapiens RAB9-like protein (LOC51209), mRNA
3264	16318	29239	1.52	1.0E-123	6912617	NT	Homo sapiens glutamyl-peptide cyclotransferase (glutamyl cyclase) (QPCT), mRNA
5522	18621	31555	1.58	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5522	18621	31556	1.58	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5681	18757	31825	1.31	1.0E-123	BE789746.1	EST_HUMAN	801591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6613	19671	32949	1.87	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
7108	20223	33554	0.83	1.0E-123	H53108.1	EST_HUMAN	y84a03.1 Scores fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:202444 5' similar to SP-YAK1_YEAST P14880 PROTEIN KINASE YAK1;
7212	20235	33589	1.24	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
7400	20368	33721	0.57	1.0E-123	U65258.1	NT	Human HRAVON/CAM precursor (hRAVON/CAM) gene, complete cds
7632	20592	33955	0.9	1.0E-123	11525833	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 2 (HS3ST2), mRNA
7804	20847	34232	1.29	1.0E-123	11436439	NT	Homo sapiens 2'-5'-oligoadenylate synthetase 2 (OAS2), mRNA
7913	20856	34244	1.87	1.0E-123	BE263001.1	EST_HUMAN	801152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3509162 5'
8083	21020	34419	0.71	1.0E-123	N55841.1	EST_HUMAN	y88d11.1 Scores melanocyte 2N1d1M Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR.S49811
8083	21020	34420	0.71	1.0E-123	N55841.1	EST_HUMAN	S49811 protein kinase PkpA - Phycomyces blakesleeanus;
8248	21217	34628	0.5	1.0E-123	AU131881.1	EST_HUMAN	y88d11.1 Scores melanocyte 2N1d1M Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR.S49811
8248	21217	34627	0.5	1.0E-123	AU131881.1	EST_HUMAN	S49811 protein kinase PkpA - Phycomyces blakesleeanus;
8880	21847		1.43	1.0E-123	AW371924.1	EST_HUMAN	AU131881 NT2RP3 Homo sapiens cDNA clone NT2RP3003409 5'
9724	22752	36205	2.03	1.0E-123	AB007923.1	NT	RC4-BT0311-251188-012-607 BT0311 Homo sapiens cDNA
9863	22789	36253	31.72	1.0E-123	U09823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
10370	23283		0.44	1.0E-123	4504808	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabelfa2) mRNA, complete cds
12028	24905	39489	5.3	1.0E-123	BF677292.1	EST_HUMAN	Homo sapiens jerky (mouse) homolog-like (JRK1), mRNA
12028	24905	39500	5.3	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
268	13364	26286	1.18	1.0E-124	4507500	NT	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
268	13364	26289	1.18	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
274	13370		0.78	1.0E-124	D87676.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
486	13559	26485	2.11	1.0E-124	AL163246.2	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
682	13754	26683	8.04	1.0E-124	AA397551.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
682	13754	26684	8.04	1.0E-124	AA397551.1	EST_HUMAN	z81804.1 Strategic echizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
758	13818	26763	6.08	1.0E-124	AF155654.1	NT	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
809	13867	26816	1.34	1.0E-124	4507500	NT	z81804.1 Strategic echizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
905	13980	26916	4.34	1.0E-124	7705446	NT	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
1349	14384	27352	12.68	1.0E-124	AF274892.1	NT	Human putative ribosomal protein S1 mRNA
1349	14384	27353	12.68	1.0E-124	AF274892.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
							Homo sapiens hypodermal protein (HSPC088), mRNA
							Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
							Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1632	14659	27657	2.84	1.0E-124	AJ131712.1	NT	Homo sapiens mRNA for nuclear RNA-helicase (ncl-h61 gene)
2076	15093	28110	1.69	1.0E-124	BE978524.1	EST_HUMAN	601491715F1 NIH_MGC_99 Homo sapiens cDNA clone IMAGE:3893954 5'
2463	15467	28490	1.29	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
3502	16549	29475	0.81	1.0E-124	S78584.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ16/BIR1) gene, exon
3502	16549	29476	0.81	1.0E-124	S78584.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ16/BIR1) gene, exon
3915	16955	29887	0.84	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4102	17136	30031	0.95	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4772	17792	30683	0.81	1.0E-124	BE220437.1	EST_HUMAN	h99c07.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175788 3'
4775	17795	30687	1.67	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
5370	18475	31348	10.25	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5755	18949	32029	1.03	1.0E-124	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
5889	19074	32272	6.55	1.0E-124	BF696135.1	EST_HUMAN	602124644F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4281635 5'
6293	19365	32804	0.67	1.0E-124	AV711263.1	EST_HUMAN	AV711263 Cu Homo sapiens cDNA clone GUAADR07 5'
6572	19832	32889	0.78	1.0E-124	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7208	20231	33564	2.95	1.0E-124	Y11717.1	NT	M.musculus mRNA for hox3 gene
7344	20315	33659	1.04	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2966595 5'
7344	20315	33660	1.04	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2966595 5'
7801	20763	34129	2.59	1.0E-124	AA630331.1	EST_HUMAN	ac08h05.s1 Stratagene Hela cell s3 937216 Homo sapiens cDNA clone IMAGE:855897 3'
8126	21065	34464	1.78	1.0E-124	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
8126	21065	34465	1.78	1.0E-124	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
8601	21569	34985	13.39	1.0E-124	4506854	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
8808	21773	35198	1.25	1.0E-124	AW612106.1	EST_HUMAN	hg94a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2353240 3' similar to TR:O65162
8808	21773	35199	1.25	1.0E-124	AW612106.1	EST_HUMAN	O65162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9517	22480	35924	0.62	1.0E-124	A1798864.1	EST_HUMAN	hg94a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2353240 3' similar to TR:O65162
9517	22480	35925	0.62	1.0E-124	A1798864.1	EST_HUMAN	O65162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9846	22782	36236	1.85	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2321428 3'
9846	22782	36237	1.85	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2321428 3'
9837	22864	36325	0.66	1.0E-124	AF022655.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9937	22864	36326	0.66	1.0E-124	AF022655.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9967	22894	36356	8.08	1.0E-124	A1767133.1	EST_HUMAN	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9967	22894	36357	8.08	1.0E-124	A1767133.1	EST_HUMAN	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9967	22894	36357	8.08	1.0E-124	A1767133.1	EST_HUMAN	w63f02.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
9967	22894	36357	8.08	1.0E-124	A1767133.1	EST_HUMAN	w63f02.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'

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Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10230	23155	36945	1.75	1.0E-124	AW503755.1	EST_HUMAN	UI-HF-BNO-ekz-b-04-0-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078848 5'
11388	24333	37862	1.53	1.0E-124	U94776.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, exons 6 through 17
11680	24598	38169	5.95	1.0E-124	AW685663.1	EST_HUMAN	h05c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808008 3'
11801	23956	37479	2.06	1.0E-124	AK48455.1	EST_HUMAN	Y19a03.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141880 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
11801	23956	37480	2.06	1.0E-124	AK48455.1	EST_HUMAN	Y19a03.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141880 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
12305	13754	26883	4.06	1.0E-124	AA397551.1	EST_HUMAN	Z81B04.L1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT).;
12305	13754	26884	4.06	1.0E-124	AA397551.1	EST_HUMAN	Z81B04.L1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT).;
12730	25383	31749	1.36	1.0E-124	AB028016.1	NT	Homo sapiens mRNA for KIAA1063 protein, partial cds
12983	25852	31436	1.67	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12983	25852	31437	1.67	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
319	13411		-10.43	1.0E-125	AB032898.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
426	13121	26019	5.43	1.0E-125	BE743822.1	EST_HUMAN	601877981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928885 5'
645	13711	26632	1.28	1.0E-125	AI110658.1	EST_HUMAN	HA0088 Human fetal liver cDNA library Homo sapiens cDNA
645	13711	26633	1.28	1.0E-125	AI110658.1	EST_HUMAN	HA0088 Human fetal liver cDNA library Homo sapiens cDNA
729	13790	26725	2.34	1.0E-125	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
861	13917	26875	1.61	1.0E-125	AA042813.1	EST_HUMAN	Z633c07.s1 Soares_pregnant_uterus_NihHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X63667_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
1000	14051	27003	1.16	1.0E-125	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1166	14198	27148	2.2	1.0E-125	7682270	NT	Homo sapiens KIAA0744 gene product, histone deacetylase 7 (KIAA0744), mRNA
1682	15874	27682	1.89	1.0E-125	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1817	14844	27836	1.65	1.0E-125	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1828	14855	27852	2.84	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1828	14855	27853	2.84	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
2366	15374	28395	1.78	1.0E-125	AA011278.1	EST_HUMAN	Z01g08.L1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428568 5'
2604	15904	28628	1.19	1.0E-125	4604698	NT	Homo sapiens inhibitor, alpha (INH) mRNA
2604	15904	28627	1.19	1.0E-125	4504696	NT	Homo sapiens inhibitor, alpha (INH) mRNA
3022	18311	28001	1.19	1.0E-125	BE018009.1	EST_HUMAN	bb74f08.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3048131 5' similar to TR:O65604 O65604 ZINC FINGER PROTEIN.;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3872	18911	29821	1.11	1.0E-125	AA042813.1	EST_HUMAN	z65307.s1 Soares_pregnant_uterus_NIH/PU Homo sapiens cDNA clone IMAGE:488540 3' similar to
4580	17802	30488	1.86	1.0E-125	11425114	NT	gbcX69357_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMF07E (HUMAN);
4580	17802	30488	1.86	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4848	17889	30558	1.68	1.0E-125	BE315412.1	EST_HUMAN	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5873	18058	32259	1.47	1.0E-125	11436448	NT	601141152F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140788 5'
5894	18078	32276	1.01	1.0E-125	BE176169.1	EST_HUMAN	Homo sapiens KIAA0885 protein (KIAA0885), mRNA
6041	18123	32328	3.58	1.0E-125	BE882680.1	EST_HUMAN	QV2-HT0577-010500-185-b08 HT0577 Homo sapiens cDNA
6086	19168	32378	0.6	1.0E-125	AI679904.1	EST_HUMAN	601483472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918962 5'
6413	19481	32728	0.68	1.0E-125	BE786055.1	EST_HUMAN	601483472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918962 5'
6733	19789	33068	1.29	1.0E-125	BE862828.1	EST_HUMAN	601305670F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3840087 5'
6733	19789	33068	1.29	1.0E-125	BE862828.1	EST_HUMAN	601305670F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3840087 5'
7263	19898	33296	5.05	1.0E-125	X03427.1	NT	601335826F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3688790 5'
7263	19898	33297	5.05	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7775	20728	34100	1.04	1.0E-125	BE788923.1	EST_HUMAN	Homo sapiens IGF-II gene, exon 5
8032	20869	34363	0.54	1.0E-125	11425572	NT	601158078F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505603 5'
8891	21857	35278	0.99	1.0E-125	U80288.1	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8891	21857	35278	0.99	1.0E-125	U80288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9473	22437	35875	12.5	1.0E-125	BE181840.1	EST_HUMAN	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9473	22437	35878	12.6	1.0E-125	BE181840.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9736	22764	36219	0.93	1.0E-125	AI565896.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
10819	23740	37242	0.65	1.0E-125	BE784578.1	EST_HUMAN	tr52b03.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2171981 3' similar to TR:Q14089 Q14089
10860	23780	37280	0.74	1.0E-125	AB002298.1	NT	HYPOTHETICAL PROTEIN:
11042	24006	37533	2.54	1.0E-125	AF043458.1	NT	601580345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944531 5'
11124	24084	37610	1.97	1.0E-125	AW131202.1	EST_HUMAN	Human mRNA for KIAA0300 gene, partial cds
11124	24084	37611	1.97	1.0E-125	AW131202.1	EST_HUMAN	Homo sapiens HREL gene, exon 5
11471	24414	37863	2.99	1.0E-125	AB014567.1	NT	xf59f02.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284
11621	24559	38121	2.08	1.0E-125	7688505	NT	LAMBDA/OTA CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284
							xf59f02.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284
							LAMBDA/OTA CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284
							LAMBDA/OTA PROTEIN KINASE C-INTERACTING PROTEIN. [1];
							Homo sapiens mRNA for KIAA0867 protein, partial cds
							Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH11), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11628	24584	38128	5	1.0E-125	AF028028.1	NT	Homo sapiens poly(A) binding protein II (PABP2) gene, complete cds
11729	24615	38182	1.08	1.0E-125	AW612889.1	EST_HUMAN	RC3-ST0188-250200-018-c11 ST0188 Homo sapiens cDNA
11830	24713	38288	4.32	1.0E-125	BE074287.1	EST_HUMAN	QV3-BT0568-020200-075-g09 BT0568 Homo sapiens cDNA
11830	24713	38287	4.32	1.0E-125	BE074287.1	EST_HUMAN	QV3-BT0568-020200-075-g09 BT0568 Homo sapiens cDNA
12106	18942	32127	1.48	1.0E-125	BF083945.1	EST_HUMAN	602139874F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4300770 5'
776	13834	28780	6.16	1.0E-126	4758007	NT	Homo sapiens CDC-like kinase (CLK) mRNA
920	13974	28928	0.8	1.0E-126	X68735.1	NT	H. sapiens gene for alpha1-antitrypsin, exon 3
2352	15391	28383	0.91	1.0E-126	8923056	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2352	15391	28384	0.91	1.0E-126	8923056	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2905	15906	28828	1.41	1.0E-126	8382078	NT	Homo sapiens RAN binding protein 2 (RANBP2), mRNA
3087	16145	29058	7.58	1.0E-126	AA160708.1	EST_HUMAN	z072c03.r1 Stragene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592420 5'
3087	16145	29059	7.58	1.0E-126	AA160708.1	EST_HUMAN	z072c03.r1 Stragene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592420 5'
3088	16146	29060	1.02	1.0E-126	BF510408.1	EST_HUMAN	UJH-B14-acc-b-05-0-UJ.st NCI_OGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084608 3'
3088	16146	29061	1.02	1.0E-126	BF510408.1	EST_HUMAN	UJH-B14-acc-b-05-0-UJ.st NCI_OGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084608 3'
3645	16688	29603	0.75	1.0E-126	X53941.1	NT	H. sapiens DNA for liver cytochrome b5 pseudogene
3668	16711	29628	2.09	1.0E-126	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
4828	17843	30741	1.15	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4828	17843	30742	1.15	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4872	17889	30777	1.38	1.0E-126	N34078.1	EST_HUMAN	yc78c08.r1 Soares melanocyte 2NtHM Homo sapiens cDNA clone IMAGE:267850 5'
5787	18879	32061	0.71	1.0E-126	T66888.1	EST_HUMAN	yc52b12.st Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:66527 3'
6360	19429	32872	3.23	1.0E-126	AA460075.1	EST_HUMAN	z066a03.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:786444 5' similar to
6422	19489	32739	3.5	1.0E-126	AB040658.1	NT	TR:G1145880 G1145880 TITIN;
6422	19489	32740	3.5	1.0E-126	AB040658.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7742	20698	34061	0.88	1.0E-126	AF257737.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7742	20698	34062	0.88	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7969	20908	34298	0.84	1.0E-126	AU139463.1	EST_HUMAN	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
8031	20908	34382	0.86	1.0E-126	AB08483.1	EST_HUMAN	AU139463 PLACE1 Homo sapiens cDNA clone PLACE1004325 5'
8210	21179	34587	0.92	1.0E-126	AB037715.1	NT	w08f01.x1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2350008 3' similar to
8210	21179	34588	0.92	1.0E-126	AB037715.1	NT	SW_MPP2_HUMAN Q14168 MAGUK P55 SUBFAMILY MEMBER 2;
8320	21289	34703	4.9	1.0E-126	X16609.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
						NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
						NT	Human mRNA for ankyrin (variant 2.1)

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8524	21482	34907	1.02	1.0E-126	AA483368.1	EST_HUMAN	ne74b12.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:808983 similar to SW:TSG6_HUMAN P88068 TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR :
10166	23080	36655	0.44	1.0E-126	4505424	NT	Homo sapiens neuro-oncological viral antigen 1 (NOVA1), splice variant 1, mRNA
11208	24162	37682	4.45	1.0E-126	BF683175.1	EST_HUMAN	802139138F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4288240 5'
11846	24728	38315	2.86	1.0E-126	BE261660.1	EST_HUMAN	801149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502129 5'
12766	18362	31297	7.78	1.0E-126	BE743822.1	EST_HUMAN	801577081F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3026685 5'
173	13275	26201	1.37	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
173	13275	26202	1.37	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
174	13275	26201	1.7	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
174	13275	26202	1.7	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
273	13369	26296	0.9	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
273	13369	26297	0.9	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
882	13937	26896	0.88	1.0E-127	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
917	13971	26825	2.54	1.0E-127	U72621.2	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
1700	14730	27712	1.18	1.0E-127	4827053	NT	Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
2080	15097	28113	4.83	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2080	15097	28114	4.83	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2210	15225	28246	10.89	1.0E-127	4506820	NT	Homo sapiens ribosomal protein L26 (RPL26) mRNA
2349	15358	28390	3.28	1.0E-127	AF245505.1	NT	Homo sapiens adiccan mRNA, complete cds
2617	15615	28840	2.23	1.0E-127	X12881.1	NT	Human mRNA for cytokeratin 18
2628	15627	28851	1.15	1.0E-127	AA450131.1	EST_HUMAN	zc42a02.r1 Soares_total_fetus_Nb2HIF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
2628	15627	28852	1.15	1.0E-127	AA450131.1	EST_HUMAN	zc42a02.r1 Soares_total_fetus_Nb2HIF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
3702	16745	28658	0.98	1.0E-127	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3824	16884	28768	0.81	1.0E-127	AW161287.1	EST_HUMAN	au80e08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782594 5' similar to TR-Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN ;contains element MER22 repetitive element ;
4249	17278	30159	0.64	1.0E-127	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4282	17311	30189	20.15	1.0E-127	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4282	17311	30190	20.15	1.0E-127	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4523	17548	30436	1.42	1.0E-127	AF252297.1	NT	Homo sapiens cytochrome P450 reductase metabolizing protein P450RAI-2 mRNA, complete cds
4633	17654	30541	5.27	1.0E-127	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4663	17694		2.42	1.0E-127	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
4700	17721	30614	1.32	1.0E-127	6812639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
							z01a10.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:291258 5' similar to SW_PIP6_RAT P10888 1-PHOSPHATIDYLINOSITOL-4,5-BISPHOSPHATE PHOSPHODIESTERASE DELTA 1;
5791	18893	32065	1.48	1.0E-127	W03547.1	EST_HUMAN	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
5828	18916	32100	2.07	1.0E-127	4828863	NT	H. sapiens NOS2 gene, exon 6
5900	18987	32178	4.61	1.0E-127	X85764.1	NT	H. sapiens TCF11 gene, exon 3-6
6288	19358	32594	1.95	1.0E-127	X84060.1	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
8454	19519	32768	5.46	1.0E-127	4504778	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3), mRNA
8816	19889	33168	0.91	1.0E-127	11421695	NT	Homo sapiens reelin (RELN) mRNA
7284	19898	33288	1.05	1.0E-127	4828977	NT	Homo sapiens Pendred syndrome (PDS), mRNA
8068	21003	34400	1.34	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
8066	21003	34401	1.34	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
8078	21013	34413	0.58	1.0E-127	BF671355.1	EST_HUMAN	602151232F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4292575 5'
8079	21016	34416	0.6	1.0E-127	AW696282.1	EST_HUMAN	QV3-BN0046-150300-121-H11 BN0046 Homo sapiens cDNA
9239	22205	35637	1.12	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9239	22205	35638	1.12	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9898	22926	36390	4.63	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9898	22925	36391	4.63	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10232	23157	36846	0.76	1.0E-127	AI288932.1	EST_HUMAN	gm84h08.x1 NCI_CGAP Lu5 Homo sapiens cDNA clone IMAGE:1886449 3'
10708	23630	37126	1.86	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
11492	24435	37983	5.12	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 98 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11492	24435	37984	5.12	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 98 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11949	24828	38423	2.78	1.0E-127	BE895415.1	EST_HUMAN	601434794F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3918917 5'
11949	24828	38424	2.78	1.0E-127	BE895415.1	EST_HUMAN	601434794F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3918917 5'
12089	21003	34400	2.11	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
12089	21003	34401	2.11	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
12532	13275	26201	1.39	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12532	13275	26202	1.39	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12721	26376	31776	2.4	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
13062	25856		1.47	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
460	13533	26460	3.35	1.0E-128	BE355617.1	EST_HUMAN	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618822 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1158	14200	27160	2.18	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1158	14200	27151	2.18	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2084	15101	28117	9.34	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2084	15101	28118	8.34	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2219	15233	28257	31.4	1.0E-128	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
2451	15458		1.49	1.0E-128	11497455	NT	Homo sapiens chromatin-specific transcription elongation factor, 140 kDa subunit (FACTP140), mRNA
3405	18454	26377	1.23	1.0E-128	AB033073.1	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds
4693	17714	30809	5.95	1.0E-128	11426873	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
5624	18720	31879	0.64	1.0E-128	X686339.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exon 12
6558	18618	32883	1.84	1.0E-128	11420865	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
7118	20050	33353	6.42	1.0E-128	BF224345.1	EST_HUMAN	7q68b10.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3605784 5'
7661	20621	33988	0.69	1.0E-128	BE614105.1	EST_HUMAN	601503846F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3605784 5'
7883	20922	34313	0.53	1.0E-128	BF529831.1	EST_HUMAN	602042322F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4178988 5'
7883	20922	34314	0.53	1.0E-128	BF529831.1	EST_HUMAN	602042322F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4178988 5'
7883	20922	34315	0.53	1.0E-128	BF529831.1	EST_HUMAN	602042322F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4178988 5'
8080	21017	34417	0.62	1.0E-128	11545923	NT	Homo sapiens putative ABC transporter (WHITE2), mRNA
8139	21078	34478	0.49	1.0E-128	AB046858.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
8139	21078	34477	0.49	1.0E-128	AB046858.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
8893	21859	35281	0.5	1.0E-128	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8893	21859	35282	0.5	1.0E-128	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
10496	23418	36817	1.73	1.0E-128	AA639188.1	EST_HUMAN	ns04a1.1 NCL_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:1182620 similar to TR:G951338 G951338
11065	24028	37552	3.42	1.0E-128	11425254	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS.;
11073	24035	37559	3.94	1.0E-128	AA826859.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA
11149	24109	37635	1.48	1.0E-128	AJ252060.1	NT	cm88H08.s1 NCL_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1552383 3' similar to gb:U54941 CYCLIN-
11202	24158	37687	2.69	1.0E-128	BE384475.1	EST_HUMAN	DEPENDENT KINASES REGULATORY SUBUNIT 1 (HUMAN);
12400	25174		8.88	1.0E-128	AW955290.1	EST_HUMAN	Homo sapiens mRNA for TRABID protein (TRABID gene)
122	13488	28423	0.89	1.0E-128	S37722.1	NT	601277826F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618750 5'
413	13488	28423	1	1.0E-128	S37722.1	NT	EST367980 IMAGE resequenced, MAGC Homo sapiens cDNA
1731	14761	27745	3.06	1.0E-128	AL098880.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1736	14768	27750	2.5	1.0E-128	AF240786.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
							Novel human mRNA containing Zinc finger C2H2 type domains
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1736	14786	27751	2.5	1.0E-128	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1863	14888	27885	2.88	1.0E-128	11418522	NT	Homo sapiens zinc finger protein 78 (expressed in testis) (ZNF78), mRNA
3145	16202	28113	1.33	1.0E-128	Q14685	SWISSPROT	ZINC FINGER PROTEIN HZF10
3145	16202	28114	1.33	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3145	16202	28115	1.33	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
4182	17228	30112	1.87	1.0E-128	AB040882.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
4309	17338	30216	1.86	1.0E-128	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151895 similar to CMYA5
4309	17338	30217	1.86	1.0E-128	AW755254.1	EST_HUMAN	Cardiomyopathy associated gene 5
6210	18284	32516	4.28	1.0E-128	AJ006345.1	NT	Cardiomyopathy associated gene 5
6874	19731	33007	0.54	1.0E-128	BE888834.1	EST_HUMAN	Homo sapiens KVLQ11 gene
7334	20305	33849	4.07	1.0E-128	AJ006345.1	NT	601513861F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915350 5'
7398	20364	33716	6.8	1.0E-128	11420850	NT	Homo sapiens KVLQ11 gene
7771	20724	34095	0.78	1.0E-128	AF041058.1	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC636894), mRNA
7771	20724	34096	0.78	1.0E-128	AF041058.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
8661	21629		4.37	1.0E-128	AB014584.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
10439	23361	36850	0.79	1.0E-128		NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
10439	23361	36851	0.79	1.0E-128	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
10878	23788	37289	0.48	1.0E-128	AI188117.1	EST_HUMAN	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
10878	23788	37300	0.48	1.0E-128	AI188117.1	EST_HUMAN	q40d08.x1 NCI CGAP Bm25 Homo sapiens cDNA clone IMAGE:1858958 3' similar to TR:Q14840 Q14840
11557	24497	38053	2.69	1.0E-128	AA625528.1	EST_HUMAN	MITOGEN INDUCIBLE GENE MIG-2:
11630	24364	33716	6.2	1.0E-128	11420850	NT	q40d08.x1 NCI CGAP Bm25 Homo sapiens cDNA clone IMAGE:1858958 3' similar to TR:Q14840 Q14840
12388	25164		4.21	1.0E-128	H83155.1	EST_HUMAN	MITOGEN INDUCIBLE GENE MIG-2:
12758	25401		2.63	1.0E-128	AL120739.1	EST_HUMAN	af7287.f1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:1047589 5'
77	13194	28117	0.65	1.0E-130	7705530	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC636894), mRNA
1174	14215	27170	5.85	1.0E-130	AB037835.1	NT	Y4-9c-05.f1 Soares fetal liver spleen TINFSL Homo sapiens cDNA clone IMAGE:189112 6' similar to
1675	14707	27685	13.33	1.0E-130	BE275182.1	EST_HUMAN	SP-B48160 B48160 HP-25-HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS-ASIAN;
1675	14707	27688	13.33	1.0E-130	BE275182.1	EST_HUMAN	DKFZp762K171.1 782 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762K171 5'
2000	15021		3.15	1.0E-130	X04082.1	NT	Human gene for catalase (EC 1.11.1.6) exon 9 mapping to chromosome 11, band p13

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2781	15773		8.37	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2890	15949	28884	1.3	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
2890	15949	28885	1.3	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
3591	16836	28558	1.27	1.0E-130	AF240888.1	NT	Homo sapiens refined dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3779	15949	28884	4.55	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
3779	15949	28885	4.55	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
3957	16887	28912	1.41	1.0E-130	AW503580.1	EST_HUMAN	UHLF-BNO-ary-g-08-0-ULF1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
4059	17133	30027	1	1.0E-130	M97710.1	NT	Human T-cell receptor (V alpha 22.1, J alpha RPLM4285-variant, C alpha 1) mRNA
4569	17592	30485	8.22	1.0E-130	AW843983.1	EST_HUMAN	CM4-CN0045-180200-811-402 CN0045 Homo sapiens cDNA
5133	18142	31021	1.63	1.0E-130	AW363289.1	EST_HUMAN	RCO-CT0318-201199-031-at1 CT0318 Homo sapiens cDNA
5133	18142	31022	1.53	1.0E-130	AW363289.1	EST_HUMAN	RCO-CT0318-201199-031-at1 CT0318 Homo sapiens cDNA
6891	18943	33239	0.63	1.0E-130	X57825.1	NT	Human germline immunoglobulin lambda light chain pseudogene (Vil.1)
6894	20120	33433	0.89	1.0E-130	AW843975.1	EST_HUMAN	CM0-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
6894	20120	33434	0.89	1.0E-130	AW843975.1	EST_HUMAN	CM0-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
7010	20136	33452	0.88	1.0E-130	11425446	NT	Homo sapiens estrogen-responsive B box protein (EBBP), mRNA
7468	20432	33788	2.08	1.0E-130	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC8A7), mRNA
7574	20536	33694	0.55	1.0E-130	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7574	20536	33695	0.55	1.0E-130	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
8030	21896		0.9	1.0E-130	AF008551.1	NT	Homo sapiens aurora-related kinase 1 (ARK1) mRNA, complete cds
9171	22137	33563	2.91	1.0E-130	AW850242.1	EST_HUMAN	EST368312 IMAGE resequences, MAGD Homo sapiens cDNA
9569	22631	35081	1.74	1.0E-130	AB037758.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
10283	23218		1.29	1.0E-130	AW103454.1	EST_HUMAN	xd36e06.x1 NC1_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2568874 3'
12015	24892	39489	1.71	1.0E-130	4504142	NT	Homo sapiens glutamate receptor, metabotropic 5 (GRM5) mRNA
13046	15773		1.44	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
4	13125	26023	2.64	0.0E+00	AA228128.1	EST_HUMAN	z58c04.t1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:667650 5' similar to TR:G222811
4	13125	26024	2.64	0.0E+00	AA228128.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
8	13128	26028	2.59	0.0E+00	4885136	NT	z58c04.t1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:667650 5' similar to TR:G222811
16	13136	26034	0.66	0.0E+00	8923349	NT	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
16	13136	26035	0.66	0.0E+00	8923349	NT	Homo sapiens checkpoint suppressor 1 (CHES1), mRNA
23	13143	26042	1.8	0.0E+00	D83327.1	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
23	13143	26043	1.8	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
23	13143	26043	1.8	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
28	13149	28048	51.1	0.0E+00	AF141949.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
36	13158	28060	0.87	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
42	13162	28065	4.86	0.0E+00	6857825	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
58	13178	28080	2.13	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
58	13178	28081	2.13	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
61	13180	28085	1.27	0.0E+00	D78804.1	EST_HUMAN	HUM516H088 Human placenta polyA+ (TFujiiwara) Homo sapiens cDNA clone GEN-516H08 5'
61	13180	28088	1.27	0.0E+00	D78804.1	EST_HUMAN	HUM516H088 Human placenta polyA+ (TFujiiwara) Homo sapiens cDNA clone GEN-516H08 5'
62	13181	28097	25.34	0.0E+00	L16558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds
64	13183	28100	11.49	0.0E+00	AW089534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
64	13183	28101	11.49	0.0E+00	AW089534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
68	13186		1.16	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
76	13193	28115	4.08	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
76	13193	28116	4.08	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
78	13193	28115	2.97	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
78	13193	28116	2.97	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
82	13198	28122		0.79	4501850	NT	Homo sapiens aminotride binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondria protein, mRNA
83	13199		18.85	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
91	13207	28131	80.76	0.0E+00	5016088	NT	Homo sapiens actin, beta (ACTB) mRNA
94	13210	28134	16.85	0.0E+00	U89277.1	NT	Human polyhomeotic 1 homolog (HHP1) mRNA, partial cds
101	13217	28141	2.55	0.0E+00	A1114743.1	EST_HUMAN	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
102	13218	28142	1.19	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
116	13227	28151		0.83	A1623701.1	EST_HUMAN	ts38b05.x1 NCI_QGAP_UH Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q88551 Q88551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
117	13227	28151		0.78	A1623701.1	EST_HUMAN	ts38b05.x1 NCI_QGAP_UH Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q88551 Q88551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
118	13236	28152	0.64	0.0E+00	N36040.1	EST_HUMAN	Y901108.t1 Soares melanocyte 2Nblm Homo sapiens cDNA clone IMAGE:270017 5'
118	13236	28153	0.64	0.0E+00	N36040.1	EST_HUMAN	Y901108.t1 Soares melanocyte 2Nblm Homo sapiens cDNA clone IMAGE:270017 5'
121	13230	28158	0.55	0.0E+00	4505458	NT	Homo sapiens neuropilin 2 (NRP2) mRNA
131	13236	28166	5.49	0.0E+00	4505938	NT	Homo sapiens polynucleotide (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
131	13236	28167	5.49	0.0E+00	4505938	NT	Homo sapiens polynucleotide (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
139	13474	28407	0.65	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
141	13244	28174	0.85	0.0E+00	T56945.1	EST_HUMAN	yab3g04.r2 Stratagene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:68310 5'
141	13244	28175	0.85	0.0E+00	T56945.1	EST_HUMAN	yab3g04.r2 Stratagene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:68310 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
154	13257		54.2	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
155	13261	26188	4.4	0.0E+00	BF036881.1	EST_HUMAN	601400375F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3863803 5'
160	13263		39.14	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
163	13268	26181	0.82	0.0E+00	AF111188.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
165	13268	26192	0.74	0.0E+00	BE295873.1	EST_HUMAN	601174270F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:3528864 5'
166	13268	26192	1.17	0.0E+00	BE295873.1	EST_HUMAN	601174270F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:3528864 5'
167	13268	26183	2.37	0.0E+00	W73973.1	EST_HUMAN	z682b05.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:346201 5' similar to
168	13270	26194	0.85	0.0E+00	BE162832.1	EST_HUMAN	gbX16282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN);
168	13270	26195	0.85	0.0E+00	BE162832.1	EST_HUMAN	QY3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
168	13271	26198	1.59	0.0E+00	AF244088.1	NT	QY3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
172	13274	26189	14.16	0.0E+00	AL163202.2	NT	Homo sapiens zinc finger protein mRNA, complete cds
172	13274	26200	14.16	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
182	13282	26207	4.87	0.0E+00	BE018970.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C002
182	13282	26208	4.87	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
187	13287	26211	4.35	0.0E+00	AB018327.1	NT	CE22831;
187	13287	26212	4.35	0.0E+00	AB018327.1	NT	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
188	13288	26213	3.06	0.0E+00	AB018327.1	NT	CE22831;
188	13288	26214	3.06	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
188	13288	26225	298.4	0.0E+00	D50658.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
200	13301	26229	4.35	0.0E+00	AF273045.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
200	13301	26230	4.35	0.0E+00	AF273045.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP9) pseudogene
202	13303	26232	3.93	0.0E+00	AF167174.1	NT	Homo sapiens CTCL tumor antigen ser14-3 mRNA, complete cds
202	13303	26233	3.93	0.0E+00	AF167174.1	NT	Homo sapiens CTCL tumor antigen ser14-3 mRNA, complete cds
211	15835	26239	51.32	0.0E+00	AI587308.1	EST_HUMAN	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
211	15835	26240	51.32	0.0E+00	AI587308.1	EST_HUMAN	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
213	13313	26242	1.57	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
216	13316		43.74	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
217	13317		6.46	0.0E+00	AF132000.1	NT	Homo sapiens TADA1 protein mRNA, complete cds
223	13323	26248	1.5	0.0E+00	AB018284.1	NT	Homo sapiens TADA1 protein mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
224	13323	26248	1.81	0.0E+00	AB018284.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
225	13324	26249	3.11	0.0E+00	6878444	NT	Mus musculus testis-specific protein, Y-encoded-like (Tspy), mRNA
230	13338	26264	3.14	0.0E+00	5453805	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
240	13339		6.19	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
247	13344	26269	3.48	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
249	13346	26272	2.08	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
257	13364		9.67	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
268	13365	26290	1.2	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
269	13365	26291	1.2	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
271	13367	26293	3.56	0.0E+00	7706028	NT	Homo sapiens hypodermal protein (LOC51250), mRNA
282	13377		1.55	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
283	13378	26306	1.75	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
283	13378	26307	1.75	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
284	13379		0.98	0.0E+00	AW845283.1	EST_HUMAN	IL2-CT0031-181198-020-B03 CT0031 Homo sapiens cDNA
283	13387	26314	7.75	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
283	13387	26315	7.75	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
304	13398	26325	3.68	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
305	13399	26326	15.08	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
308	15838		12.15	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
307	13400	26327	0.8	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycylamide formyltransferase, phosphoribosylglycylamide synthetase, phosphoribosylaminoimidazole synthetase (GART) mRNA
308	13401		1.85	0.0E+00	AA480002.1	EST_HUMAN	zv18c08.r1 Soares_NH-MPU_S1 Homo sapiens cDNA clone IMAGE:753994 5'
309	13402	26328	23.16	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
310	13402	26328	22.55	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
314	13406	26332	1.76	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
327	13418	26341	2.84	0.0E+00	O14867	SW/SSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
327	13418	26342	2.84	0.0E+00	O14867	SW/SSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
328	13419	26343	4.94	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
329	13419	26343	1.14	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
344	13433	26355	0.86	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
345	13434	26356	2.48	0.0E+00	4505258	NT	Homo sapiens moesin (MSN), mRNA
348	13437	26360	3.07	0.0E+00	4827057	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
351	13440	26365	1.24	0.0E+00	U71600.1	NT	Human zinc finger protein zfp31 (zfp31) mRNA, partial cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
359	13444	26369	2.54	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
359	13444	26370	2.54	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
357	16939	26371	2.87	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
359	13446	26373	0.87	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
361	13448	26376	0.9	0.0E+00	4503954	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
362	13449	26377	1.91	0.0E+00	D80008.1	NT	Human mRNA for KIAA0184 gene, partial cds
363	13449	26377	1.41	0.0E+00	D80008.1	NT	Human mRNA for KIAA0184 gene, partial cds
365	13451	26379	0.63	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
376	13460	26390	2.41	0.0E+00	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
387	13500	26433	7.69	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
388	13501	26434	2.78	0.0E+00	AB03014.1	EST_HUMAN	q61105.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2018457 3' similar to gb:54189
392	13467	26397	2.89	0.0E+00	AW784190.1	EST_HUMAN	PHOSPHORIBOSYLAMINE--GLYCINE LIGASE (HUMAN);
395	13469	26400	1.3	0.0E+00	4503980	NT	RC2-CT0320-300100-018-009 CT0320 Homo sapiens cDNA
396	13470	26401	2.24	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
398	13470	26402	2.24	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
397	13471	26403	1.22	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
398	13472	26404	1.27	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
398	13472	26405	1.27	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
399	13473	26406	3.08	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
400	13474	26407	0.67	0.0E+00	4503980	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
401	13475	26408	2.69	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
401	13475	26409	2.69	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
402	13476	26408	2.37	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
402	13476	26409	2.37	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
406	13478		25.89	0.0E+00	4506908	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
420	13115	26013	1.44	0.0E+00	R17795.1	EST_HUMAN	Y08902.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31662 5'
428	13502	26435	2.15	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycylamide formyltransferase, phosphoribosylglycylamide synthetase,
429	13503		15.71	0.0E+00	4506728	NT	phosphoribosylamidoimidazole synthetase (GART) mRNA
430	13504	26436	1.89	0.0E+00	AB028942.1	NT	Homo sapiens ribosomal protein S6 (RPS6) mRNA
431	13505	26437	3.68	0.0E+00	4507162	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
431	13505	26438	3.68	0.0E+00	4507162	NT	Homo sapiens SON DNA binding protein (SON) mRNA
432	13506	26439	4.53	0.0E+00	AF193607.1	NT	Homo sapiens SON DNA binding protein (SON) mRNA
							Mus musculus truncated SON protein (Son) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
444	13517		1.27	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
446	13519	26452	6.45	0.0E+00	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
451	13524		0.75	0.0E+00	AA324282.1	EST_HUMAN	EST27054 Carabellum II Homo sapiens cDNA 5' end
452	13525		1.25	0.0E+00	BE254447.1	EST_HUMAN	60111520F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE3352348 5'
468	13541	26466	3.47	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
468	13541	26467	3.47	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
474	13546	26476	2.84	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
474	13546	26476	2.84	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
484	13557	26482	2.68	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
485	13558	26483	6.81	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
486	13558	26484	6.81	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
489	13568	26489	3.92	0.0E+00	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
489	13568	26491	1.83	0.0E+00	AU132898.1	EST_HUMAN	AU132898 NT2RP4 Homo sapiens cDNA clone NT2RP4000637 5'
504	13576	26497	1.58	0.0E+00	BE385144.1	EST_HUMAN	60127485F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE3615758 5'
505	13576	26498	1.88	0.0E+00	AW938825.1	EST_HUMAN	PMO-DT0065-130400-002-c08 DT0065 Homo sapiens cDNA
508	13579	26500	1.47	0.0E+00	AL117233.1	NT	Novel human gene mapping to chromosome 1
509	13580	26501	0.9	0.0E+00	8923955	NT	Homo sapiens gene mapping to chromosome 1
513	13584		0.82	0.0E+00	BF373403.1	EST_HUMAN	Homo sapiens PC326 protein (PC326), mRNA
520	13591	26511	5.32	0.0E+00	AL163210.2	NT	IL2-FT0159-070800-120-F07 FT0159 Homo sapiens cDNA
527	15843	26515	1.15	0.0E+00	BE081527.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
532	13603	26521	1.61	0.0E+00	BF028005.1	EST_HUMAN	QV2-BT0635-160400-142-H05 BT0635 Homo sapiens cDNA
538	13609	26528	2.23	0.0E+00	AB040309.1	NT	601784858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE3398988 5'
541	13612	26531	10.84	0.0E+00	6006030	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
542	13613	26532	4.46	0.0E+00	4504038	NT	Homo sapiens transcription elongation factor B (SII), polypeptide 1-like (TCEB1L) mRNA
542	13613	26533	4.46	0.0E+00	4504038	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
544	13616	26536	0.99	0.0E+00	8923831	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
545	13616	26538	1.2	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
545	13616	26537	1.2	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
550	13620		5.14	0.0E+00	AF003528.1	NT	Homo sapiens X-linked ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
558	13628	26546	1.55	0.0E+00	AW135324.1	EST_HUMAN	U1H-B11-ecb-1-04-0-UL.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE2713951 3'
588	13638		2.54	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
588	13638						Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), nuclear gene encoding mitochondrial protein, mRNA
588	13658	26571	2.72	0.0E+00	5174742	NT	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
601	13668		15.19	0.0E+00	J04068.1	NT	Human apolipoprotein A-I (ApoA-I) gene, exon 1
604	13671	26585	1.83	0.0E+00	BF104898.1	EST_HUMAN	601822827F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4045447 5'
606	13673	26587	0.77	0.0E+00	88236831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
608	13673	26588	0.77	0.0E+00	88236831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
611	13676	26591	0.89	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
616	13681	26597	1.6	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
618	13681	26598	1.6	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
623	13688	26605	1.86	0.0E+00	AF148773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
625	13690	26608	1.83	0.0E+00	AB037807.1	NT	Homo sapiens mRNA for KIAA1388 protein, partial cds
627	13692	26609	0.85	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
628	13693	26610	1.55	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
628	13693	26611	1.55	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
629	13694	26612	1.34	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
629	13694	26613	1.34	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
638	13702	26623	1.35	0.0E+00	AA399486.1	EST_HUMAN	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
640	13706	26627	4.61	0.0E+00	D117078.1	NT	Z160607.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726732 5'
							Homo sapiens RGH2 gene, retrovirus-like element
644	13710	26630	1.86	0.0E+00	W78811.1	EST_HUMAN	Z161604.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to
							gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
644	13710	26631	1.86	0.0E+00	W78811.1	EST_HUMAN	Z161604.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to
							gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
647	13713		5.61	0.0E+00	48855526	NT	Homo sapiens novel SH2-containing protein 3 (NSP3) mRNA
654	13720	26643	2.78	0.0E+00	6006003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B) mRNA
656	13722	26646	2.3	0.0E+00	5031824	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
659	13725	26650	3.11	0.0E+00	U05235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
663	13728	26653	0.99	0.0E+00	AF108380.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCaS (NCX1) mRNA, complete cds
663	13728	26654	0.99	0.0E+00	AF108380.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCaS (NCX1) mRNA, complete cds
668	13734	26659	4.94	0.0E+00	4826847	NT	Homo sapiens protein kinase, X-linked (PRICK) mRNA
669	13734	26660	4.94	0.0E+00	4826847	NT	Homo sapiens protein kinase, X-linked (PRICK) mRNA
675	15846		3.3	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV6)
683	13746	26673	8.68	0.0E+00	4504424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1) mRNA
688	13751	26677	4.6	0.0E+00	AB028012.1	NT	Homo sapiens mRNA for KIAA1088 protein, partial cds
698	13760	26692	17.63	0.0E+00	7857468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
							np49cd1.s1 NCI_CGAP_B1.1 Homo sapiens cDNA clone IMAGE:1128633 3' similar to gb:X57352
710	13772	26706	15.52	0.0E+00	AA614537.1	EST_HUMAN	INTERFERON-INDUCIBLE PROTEIN 1-8U (HUMAN);

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
714	13778	26710	4.91	0.0E+00	M80675.1	NT	Human von Willebrand factor gene, exons 23 through 34
714	13778	26711	4.91	0.0E+00	M80675.1	NT	Human von Willebrand factor gene, exons 23 through 34
724	13786	26720	2.21	0.0E+00	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
730	13781	26726	4.69	0.0E+00	AF264760.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
730	13791	26727	4.69	0.0E+00	AF264760.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
732	13793	26730	11.38	0.0E+00	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
738	13789	26738	2.31	0.0E+00	BE241577.1	EST_HUMAN	TCAAP-1D0779 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0779
757	13817	26761	2.09	0.0E+00	AF226980.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
767	13817	26762	2.09	0.0E+00	AF226980.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
769	13819	26764	0.88	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
769	13819	26765	0.88	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
782	13822	26766	2.01	0.0E+00	AB037760.1	NT	Homo sapiens mRNA for KIAA1339 protein, partial cds
783	13822	26767	0.86	0.0E+00	6812749	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
785	13850	26769	3.03	0.0E+00	D30012.1	NT	Homo sapiens mRNA for repressor protein, partial cds
788	13825	26770	1.78	0.0E+00	BE889795.1	EST_HUMAN	601445647F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848903 5'
770	13829	26774	3.68	0.0E+00	R48915.1	EST_HUMAN	y80908.1 Soares breast 2NB-Hst Homo sapiens cDNA clone IMAGE:154046 5'
771	13830	26775	2.14	0.0E+00	5032096	NT	Homo sapiens splicing factor 3a, subunit 1, 120kD (SF3A1), mRNA
779	13838	26783	1.88	0.0E+00	AB011398.1	NT	Homo sapiens gene for AF-6, complete cds
782	13842	26787	2.77	0.0E+00	7681965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
783	13852	26789	2.38	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
783	13852	26800	2.38	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
788	13857	26804	2.72	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
802	13861	26808	3.38	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
802	13861	26809	3.38	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
807	13865	26816	10.76	0.0E+00	5174478	NT	Homo sapiens perlecanin (PCNT) mRNA
808	13868	26836	9.93	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
825	13863	26837	1.58	0.0E+00	7657213	NT	Homo sapiens homonally upregulated neu tumor-associated kinase (HUNK), mRNA
826	13864	26837	2.57	0.0E+00	7657213	NT	Homo sapiens homonally upregulated neu tumor-associated kinase (HUNK), mRNA
828	13868	26839	1.82	0.0E+00	4557686	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 1 (KCNE1) mRNA
834	13891	26845	3.12	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
834	13891	26846	3.12	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
835	13892	26847	1.34	0.0E+00	AF108830.1	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GBPA), mRNA
840	13897	26852	2.16	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GBPA), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
844	13900	26857	1.23	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
844	13900	26858	1.23	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
851	13907		1.78	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
855	13911	26869	4.48	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
855	13911	26870	4.48	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
856	13912	26871	10.69	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
857	13913	26872	4.54	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
858	13914	26873	14.11	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
862	13918	26876	1.18	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
862	13918	26877	1.18	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
863	13919	26878	1.8	0.0E+00	AA533272.1	EST_HUMAN	U68407.s1 NCI_CGAP_P10 Homo sapiens cDNA clone IMAGE:597453
863	13919	26879	1.8	0.0E+00	AA533272.1	EST_HUMAN	U68407.s1 NCI_CGAP_P10 Homo sapiens cDNA clone IMAGE:597453
864	13920		10.08	0.0E+00	BF677694.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249815 5'
868	13924	26880	1.57	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
868	13924	26881	1.57	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
869	13925	26882	1.95	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
869	13925	26883	1.95	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
892	13947	26908	0.98	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
899	13954	26911	1.72	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
899	13954	26912	1.72	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
909	13954	26921	1.69	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
919	13973		83.74	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67KD, ribosomal protein SA) (LAMR1), mRNA
921	13973		24.73	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67KD, ribosomal protein SA) (LAMR1), mRNA
922	13976	26927	0.71	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antitrypsin precursor, mRNA, partial cds
923	13976	26928	2.39	0.0E+00	U28101.1	NT	Homo sapiens kallistatin (P14) gene, exons 1-4, complete cds
925	13978	26930	0.64	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
925	13978	26931	0.64	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
926	13978	26932	0.63	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
926	13978	26933	0.63	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
946	13999	26950	2.68	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0894 protein, partial cds
946	13999	26951	2.68	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0894 protein, partial cds
952	14005	26957	0.98	0.0E+00	M37190.1	NT	Homo sapiens inhibitor mRNA, 3' end
953	14006	26958	8.74	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
954	14007	26959	0.73	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
856	14008	26960	0.83	0.0E+00	4507430	NT	Homo sapiens thyroidal embryonic factor (TEF), mRNA
856	14008	26961	0.83	0.0E+00	4507430	NT	Homo sapiens thyroidal embryonic factor (TEF), mRNA
863	15855	26968	2.24	0.0E+00	A001948.1	EST_HUMAN	os98a03.s1 NC1_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
863	15855	26969	2.24	0.0E+00	A001948.1	EST_HUMAN	os98a03.s1 NC1_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
865	14017	26971	10.17	0.0E+00	7657286	NT	Homo sapiens KIAA0929 protein Mx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
876	14027	26981	2.04	0.0E+00	AB030568.1	NT	Homo sapiens mRNA for PSP24, complete cds
884	14035	26987	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-402 GN0014 Homo sapiens cDNA
884	14035	26988	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-402 GN0014 Homo sapiens cDNA
884	14035	26989	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-402 GN0014 Homo sapiens cDNA
886	14037	26992	3.55	0.0E+00	X62207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
886	14037	26993	3.55	0.0E+00	X62207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
895	14046	27000	2.25	0.0E+00	4757989	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
1006	14058	27008	1.17	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1007	14057	27009	13.38	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1008	14057	27009	10.52	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1011	14060		2.58	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1012	14060		5.29	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1016	14084	27015	1.28	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1017	14084	27015	1.82	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1018	14084	27015	1.71	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1019	14085	27016	1.65	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1022	14088	27019	2.42	0.0E+00	7681685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1026	14072	27023	1.21	0.0E+00	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1027	14073		1.58	0.0E+00	AA458680.1	EST_HUMAN	aa86g07.s1 Stratiotes fetal retina 937202 Homo sapiens cDNA clone IMAGE:838236 3' similar to SW:FRS8_HUMAN P-47210 26S PROTEASE REGULATORY SUBUNIT 8 ;
1030	14076	27027	0.76	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 5124 similar to DNA-DIRECTED RNA POLYMERASE II (alignant Ser and Pro with BLASTx or p)
1030	14076	27028	0.76	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 5124 similar to DNA-DIRECTED RNA POLYMERASE II (alignant Ser and Pro with BLASTx or p)
1031	14077	27029	1.2	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1031	14077	27030	1.2	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1034	14080		3.19	0.0E+00	8922833	NT	Homo sapiens hypothetical protein FLJ11198 (FLJ11198), mRNA
1049	14095	27046	2.4	0.0E+00	4788569	NT	Homo sapiens heat shock 70kD protein 98 (mortalin-2) (HSPA9B) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1068	14111	27060	2.13	0.0E+00	4826872	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1069	14111	27061	2.13	0.0E+00	4826872	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1070	14115	27065	3.18	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20685 (FLJ20685), mRNA
1070	14115	27066	3.18	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20685 (FLJ20685), mRNA
1071	14116	27067	28.45	0.0E+00	A1245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1073	14118		0.82	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1076	14120	27071	3.85	0.0E+00	6174384	NT	Homo sapiens alkylation repair, alkB homolog (ABH), mRNA
1084	14128	27082	1.91	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3) mRNA
1088	14142	27082	2.62	0.0E+00	BE006208.1	EST_HUMAN	MRO-BND0115-200300-003-108 BN0115 Homo sapiens cDNA
1121	14165	27116	5.54	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCCK9), mRNA
1121	14165	27117	5.54	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCCK9), mRNA
1134	14177	27127	0.98	0.0E+00	4826847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1134	14177	27128	0.98	0.0E+00	4826847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1135	14178	27129	33.54	0.0E+00	4506712	NT	Homo sapiens ribosomal protein S27a (RPS27A) mRNA
1137	14180	27131	2.34	0.0E+00	8923280	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1140	14183	27134	8.07	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1142	14185	27135	20.89	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1143	14186	27136	5.23	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1143	14186	27137	5.23	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1147	14189	27140	1.84	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51729), mRNA
1148	14190	27141	0.76	0.0E+00	X95828.1	NT	H. sapiens ART4 gene
1148	14190	27142	0.76	0.0E+00	X95828.1	NT	H. sapiens ART4 gene
1149	14191	27143	1.25	0.0E+00	A1147650.1	EST_HUMAN	qb22410.x1 Soares_pregnant uterus_NHPU Homo sapiens cDNA clone IMAGE:1887011 3'
1161	14193	27145	1.68	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
1160	14202	27154	3.19	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1160	14202	27155	3.19	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1161	14203	27156	0.89	0.0E+00	9886944	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1172	14213	27167	8.26	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1172	14213	27168	8.26	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1176	14218	27171	1.08	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1182	14223	27180	1.21	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1198	14236	27191	0.84	0.0E+00	AF073299.1	NT	Homo sapiens Na+/H+ exchanger isoform 2 (NHE2) mRNA, complete cds
1214	14252		1.24	0.0E+00	7657336	NT	Homo sapiens mutL (E. coli) homolog 3 (MLH3), mRNA
1230	14268	27225	1.18	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E- Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1230	14268	27228	1.18	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1231	14269	27227	1.6	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1232	15881	27228	1.7	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1251	14287	27253	6.18	0.0E+00	AF108718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1252	14288	27254	0.88	0.0E+00	4503068	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1262	14297	27260	0.73	0.0E+00	4505740	NT	Homo sapiens prefoldin 4 (PF4D4) mRNA
1271	14306		2.04	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1278	14314	27276	46.44	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1286	14321	27284	4.02	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBS-CR9) mRNA, complete cds
1292	14327	27288	1.08	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1292	14327	27288	1.08	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1303	14339	27302	2	0.0E+00	5174748	NT	Homo sapiens Wilfram syndrome (WFS) mRNA
1303	14339	27303	2	0.0E+00	5174748	NT	Homo sapiens Wilfram syndrome (WFS) mRNA
1303	14339	27304	2	0.0E+00	5174748	NT	Homo sapiens Wilfram syndrome (WFS) mRNA
1304	14340		3.46	0.0E+00	AF098156.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1314	15863	27316	1.26	0.0E+00	7657629	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1314	15863	27317	1.26	0.0E+00	7657629	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1319	14354	27322	6.23	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNFG), mRNA
1320	14356	27323	0.81	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1322	14357	27324	6.68	0.0E+00	5803146	NT	Homo sapiens zinc finger protein 9 (RNFG), mRNA
1323	14358	27325	33.1	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1325	14360	27327	4.74	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
1328	14361	27328	5.7	0.0E+00	7661865	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1327	14362	27329	9.47	0.0E+00	7661865	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1328	14363	27330	5.14	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1328	14363	27331	5.14	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1340	14374	27344	2.17	0.0E+00	MT4123.1	NT	Human endogenous retrovirus HERV-K10
1407	14440	27410	1.34	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cyld gene
1415	14448	27421	1.79	0.0E+00	AI208756.1	EST_HUMAN	gg38508.x1 Soares_testis_NHTT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WIP-T27A1.5 CE14213 ;
1416	14449	27422	32.64	0.0E+00	6042208	NT	RAN, member RAS oncogene familyHomo sapiens RAN, member RAS oncogene family (RAN), mRNA
1423	14456	27430	1.31	0.0E+00	4505046	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1423	14456	27431	1.31	0.0E+00	4505046	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1425	14458	27434	2.29	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1426	14458	27435	2.29	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1427	14460	27436	6.81	0.0E+00	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1434	14468	27445	2.91	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-6fucosyltransferase (alpha1-6fucT) gene, exon 7
1447	14480	27456	1.01	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1447	14480	27457	1.01	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1457	14490	27464	3.14	0.0E+00	AL132898.1	NT	Novel human gene on chromosome 20
1458	14492	27465	2.5	0.0E+00	AL137784.1	NT	Novel human gene mapping to chromosome 1
1463	14498	27470	1.59	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1468	14498	27473	5.36	0.0E+00	6812467	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1468	14501	27475	1.7	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1468	14501	27476	1.7	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1468	14502		1.04	0.0E+00	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1513	14545	27516	2.11	0.0E+00	7706434	NT	Homo sapiens hHDC for homolog of Drosophila headcase (LOC81696), mRNA
1528	14561	27532	1.94	0.0E+00	AA481172.1	EST_HUMAN	ss34a03.r1 NC1 CGAP GC81 Homo sapiens cDNA clone IMAGE:315116 5'
1534	14567	27536	29.54	0.0E+00	AF023860.1	NT	Carophilus aethiops cyclophilin A mRNA, complete cds
1534	14567	27537	29.54	0.0E+00	AF023860.1	NT	Carophilus aethiops cyclophilin A mRNA, complete cds
1538	14569	27540	1.37	0.0E+00	AW976097.1	EST_HUMAN	EST388206 IMAGE resequences, MAGN Homo sapiens cDNA
1538	14569	27541	1.37	0.0E+00	AW976097.1	EST_HUMAN	EST388206 IMAGE resequences, MAGN Homo sapiens cDNA
1538	14571		2.22	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTF3 (FTF3) genes, complete cds
1539	14572	27544	2.25	0.0E+00	M16768.1	NT	Human T-cell receptor gamma chain VJCI-GII-CIII region mRNA, complete cds
1540	14573	27545	2.04	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1540	14573	27546	2.04	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1541	14574	27547	3.31	0.0E+00	7662405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1542	14575		7.04	0.0E+00	7666872	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1548	14581	27553	2.45	0.0E+00	M68478.1	NT	Human transglutaminase mRNA, complete cds
1551	14584	27555	1.24	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1551	14584	27556	1.24	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1552	15871		19.78	0.0E+00	4508654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
1553	14585	27557	28.31	0.0E+00	M14159.1	NT	Human laminin receptor (2H5 epitope) mRNA, 5' end
1553	14586	27571	0.94	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1553	14586	27572	0.94	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1555	14598	27573	10.15	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1583	14616	27689	9.8	0.0E+00	Z83738.1	NT	H. sapiens HH-2B/le gene
1584	14617	27690	1.81	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1584	14617	27691	1.81	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1585	14618	27692	12.82	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKc Homo sapiens cDNA clone GKCB0F02 5'
1585	14618	27693	12.82	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKc Homo sapiens cDNA clone GKCB0F02 5'
1588	15872	27696	2.54	0.0E+00	AB040905.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1592	14624	27697	1.24	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1594	14626	27699	4.83	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1594	14626	27699	4.83	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1598	14628	27692	26.26	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1598	14628	27693	26.26	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1598	14630	27695	1.86	0.0E+00	M91803.1	NT	Human sodium channel mRNA
1613	14845	27692	7.01	0.0E+00	H286973.1	EST_HUMAN	yo76c06.st Soares adult brain N2b4HB65Y Homo sapiens cDNA clone IMAGE:183948 3'
1622	14655	27692	2.31	0.0E+00	AB040829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1622	14655	27693	2.31	0.0E+00	AB040829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1644	14676	27694	1.04	0.0E+00	AW444637.1	EST_HUMAN	U1-HB13-qw-c-04-0-U1.st NCI CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
1673	14705	27692	1.19	0.0E+00	BE144394.1	EST_HUMAN	MRO-HT0169-191189-004-b11 HT0168 Homo sapiens cDNA
1673	14705	27693	1.19	0.0E+00	BE144394.1	EST_HUMAN	MRO-HT0169-191189-004-b11 HT0168 Homo sapiens cDNA
							wg81007.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371477 3' similar to TR:Q62788 Q62788 CYS2/HIS2 ZINC FINGER PROTEIN. ;
1677	14709	27687	1.84	0.0E+00	AI768104.1	EST_HUMAN	Homo sapiens hematopoietic-derived zinc finger protein (HD-ZNF1) mRNA
1678	14710	27688	1.44	0.0E+00	4758513	NT	Homo sapiens T-cell receptor gamma V1 gene region
1679	14711	27689	3.61	0.0E+00	AF057177.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1683	14714	27693	1.72	0.0E+00	M28580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1683	14714	27694	1.72	0.0E+00	M28580.1	NT	Human sapiens keratin 18 (KRT18) mRNA
1685	14716	27698	1.83	0.0E+00	4657887	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
1688	14717	27697	2.12	0.0E+00	7657065	NT	hu11405.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3186281 3' similar to TR:O65147 O65147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;
1690	14721	27700	1.27	0.0E+00	BE222374.1	EST_HUMAN	hu11405.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3186281 3' similar to TR:O65147 O65147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;
1690	14721	27701	1.27	0.0E+00	BE222374.1	EST_HUMAN	yo56908.t1 Soares breast 3NdrHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gbM84089
1693	14723	27705	5.17	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
1693	14723	27706	5.17	0.0E+00	H30132.1	EST_HUMAN	yo56908.t1 Soares breast 3NdrHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gbM84089

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1695	14725		0.04	0.0E+00	A1149880.1	EST_HUMAN	qf43f09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809 3'
1696	14726	27708	7.26	0.0E+00	Z80780.1	NT	H1.sapiens H2B/h gene
1698	14728	27708	7.26	0.0E+00	Z80780.1	NT	H1.sapiens H2B/h gene
1699	14729		28.3	0.0E+00	6031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1708	14739	27721	0.91	0.0E+00	AF188983.1	NT	Homo sapiens WNT16 protein (WNT16) mRNA, complete cds
1710	14740	27724	5.35	0.0E+00	8923841	NT	Homo sapiens FOXJ2 forkhead factor (LOC35810), mRNA
1713	14743	27727	1.03	0.0E+00	6453856	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
1716	14746	27731	0.86	0.0E+00	M75680.1	NT	Human hepatocyte growth factor gene, exon 15
1718	14748	27732	0.86	0.0E+00	M75680.1	NT	Human hepatocyte growth factor gene, exon 15
1720	14750	27736	1.37	0.0E+00	4826873	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1) mRNA
1728	14756	27743	20.03	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1728	14758		2.69	0.0E+00	S94400.1	NT	TCR zeta [human, Genomic] cDNA, 385 nt, segment 1 of 8
1737	14767	27752	0.07	0.0E+00	4557533	NT	Homo sapiens solute carrier family 28 (sulfate transporter), member 2 (SLC28A2) mRNA
1744	15876	27759	1.21	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
1760	14789	27775	2.63	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1800	15877		35.79	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1805	14833	27821	2.42	0.0E+00	4557558	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1805	14833	27822	2.42	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1807	14835	27825	2.05	0.0E+00	U63983.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1810	14838		1.32	0.0E+00	W76571.1	EST_HUMAN	zf66g09.f1 Soares_fetal_heart_NbH119W Homo sapiens cDNA clone IMAGE:345694 5'
1811	15878	27829	3.9	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1812	14839	27830	1.13	0.0E+00	AA113030.1	EST_HUMAN	z185cd09.s1 Stragene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:663056 3'
1824	14851	27846	14.86	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
1826	14853	27848	5.94	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1827	14854	27848	6.04	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF-4) mRNA
1827	14854	27850	6.04	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF-4) mRNA
1827	14854	27851	6.04	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF-4) mRNA
1851	14877	27872	6.56	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1851	14877	27873	6.56	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1861	14887	27883	1.34	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1861	14887	27884	1.34	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1865	14890	27898	3.28	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNCB1) mRNA
1866	14890	27887	3.28	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNCB1) mRNA
1868	14891	27898	6.86	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1866	14891	27898	6.86	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1869	14894	27892	1.48	0.0E+00	AW207280.1	EST_HUMAN	U1-H-B11-afn-4-07-0-U1.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1869	14894	27893	1.48	0.0E+00	AW207280.1	EST_HUMAN	U1-H-B11-afn-4-07-0-U1.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1882	14917	27912	3.46	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1882	14917	27913	3.46	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1836	14930	27896	0.93	0.0E+00	7657390	NT	Homo sapiens nuclear protein (NP220), mRNA
1836	14930	27897	0.93	0.0E+00	7657390	NT	Homo sapiens nuclear protein (NP220), mRNA
1839	14933	27899	2.02	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1839	14933	27890	2.02	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1848	14972		1.13	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1949	15881	27970	1.41	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1949	15881	27971	1.41	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1954	14977	27978	2.02	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1954	14977	27979	2.02	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1957	14979	27981	1.06	0.0E+00	7657038	NT	Homo sapiens death receptor 8 (DR8), mRNA
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1959	14981		5.83	0.0E+00	AF240786.1	NT	
1964	14986		2.93	0.0E+00	M55932.1	NT	Human tyrosinase pseudogene 1
1965	15882	27898	1.46	0.0E+00	5901905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
1973	14994	27895	1.88	0.0E+00	4808282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1973	14994	27896	1.88	0.0E+00	4808282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1984	15005		0.9	0.0E+00	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
1986	15007	28010	1.81	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1986	15007	28011	1.81	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1987	15008	28012	2.97	0.0E+00	4829638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1987	15008	28013	2.97	0.0E+00	4829638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1987	15018	28025	1.05	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
1987	15018	28026	1.05	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2003	15024	28030	1.59	0.0E+00	M53782.1	NT	Human TFEB protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2003	15024	28031	1.59	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
2005	15026	28032	1.29	0.0E+00	AW193024.1	EST_HUMAN	AB095017.x1 NCJ_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2678913 3'
2005	15028	28033	1.29	0.0E+00	AW193024.1	EST_HUMAN	AB095017.x1 NCJ_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2678913 3'
2006	15027	28034	6.19	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2006	15027	28035	6.19	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2008	15029	28037	1.33	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2009	15030	28038	1.36	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2009	15030	28039	1.36	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2016	15037	28048	3.07	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
2036	15055	28072	1.16	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2036	15055	28073	1.16	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2069	15086	28104	1.04	0.0E+00	7706742	NT	Homo sapiens TP53TG3a (TP53TG3a), mRNA
2074	15091	28108	0.92	0.0E+00	4503948	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2075	15092	28109	4.79	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone PLACE4000321 5'
2077	15094	28111	1.69	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2077	15094	28112	1.69	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2079	15098		3.79	0.0E+00	7657488	NT	Homo sapiens similar to rat Integral membrane glycoprotein POM121 (POM121L1), mRNA
2081	15098		1.64	0.0E+00	4685863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2083	15100		1.7	0.0E+00	AI244247.1	EST_HUMAN	q60f08.x1 NCJ_CGAP_U12 Homo sapiens cDNA clone IMAGE:1988871 3' similar to contains Alu repetitive element
2088	15105	28123	3.3	0.0E+00	BE877225.1	EST_HUMAN	601485148F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887747 5'
2089	15106	28124	1.88	0.0E+00	BF315325.1	EST_HUMAN	601802604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2089	15106	28125	1.88	0.0E+00	BF315325.1	EST_HUMAN	601802604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2093	15110	28129	2.38	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2093	15110	28130	2.38	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2098	15115	28136	2.35	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2098	15115	28137	2.35	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2103	15120	28141	2.29	0.0E+00	4758489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2122	15139		3.16	0.0E+00	BE767964.1	EST_HUMAN	QV1-GN0065-140800-318-CT0 GN0065 Homo sapiens cDNA
2123	15140		1.29	0.0E+00	AF018963.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLR51) gene, exon 8 and complete cds
2125	15142	28159	3.87	0.0E+00	BF027582.1	EST_HUMAN	601672066F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3854785 5'
2126	15143	28160	1.42	0.0E+00	BE072624.1	EST_HUMAN	PMO-BT0547-210300-004-F04 BT0547 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2128	15145	28161	1.26	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2131	15148	28163	2.85	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271089-022-G10 CT0219 Homo sapiens cDNA
2133	15150	28165	4.92	0.0E+00	A1904840.1	EST_HUMAN	QV-BT065-020398-092 BT065 Homo sapiens cDNA
2133	15150	28166	4.92	0.0E+00	A1904840.1	EST_HUMAN	QV-BT065-020398-092 BT065 Homo sapiens cDNA
2191	15206		1.37	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3' end
2196	15211	28228	0.83	0.0E+00	BE274696.1	EST_HUMAN	601122338F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346888 5'
2198	15213	28232	18.22	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBINDE08 5'
2198	15213	28233	16.22	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBINDE08 5'
2200	15216	28236	1.16	0.0E+00	AA931691.1	EST_HUMAN	cc32e01.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1587866 3'
2204	15219	28239	32.02	0.0E+00	BF344494.1	EST_HUMAN	602014828F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4160734 5'
2205	15220	28240	25.7	0.0E+00	BE748888.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838012 3'
2209	15224	28244	6.56	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2209	15224	28245	6.56	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2213	15387	28250	1.7	0.0E+00	BF313817.1	EST_HUMAN	601900281F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128622 5'
2216	15230	28253	1.26	0.0E+00	BE016750.1	EST_HUMAN	bb84e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TR:Q16170 Q16170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN;
2217	15231	28254	1.59	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:488540 3' similar to gb:XB5957_cds1 OLFATORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
2217	15231	28255	1.59	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:488540 3' similar to gb:XB5957_cds1 OLFATORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
2225	15239	28263	3.38	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21G004
2225	15239	28264	3.38	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21G004
2230	15244		1.57	0.0E+00	U36264.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2252	15266	28283	7.38	0.0E+00	4557566	NT	Homo sapiens E1A binding protein p500 (EP300) mRNA
2258	15272	28287	1.33	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2264	15276	28303	2.29	0.0E+00	BE895281.1	EST_HUMAN	601433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2266	15280	28305	1.56	0.0E+00	BE905563.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2266	15280	28306	1.56	0.0E+00	BE905563.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2269	15282	28308	1.54	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2308	15320	28340	1.32	0.0E+00	BF344756.1	EST_HUMAN	602014009F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4149770 5'
2308	15320	28341	1.32	0.0E+00	BF344756.1	EST_HUMAN	602014009F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4149770 5'
2308	15321	28342	4.01	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA
2309	15321	28343	4.01	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA

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2310	15322	28344	2.11	0.0E+00	AI076404.1	EST_HUMAN	cd09c07.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1674828 3'
2312	15324	28346	1.43	0.0E+00	AA428001.1	EST_HUMAN	z78a11.1 Soares total fetus Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:769740 5'
2312	15324	28347	1.43	0.0E+00	AA428001.1	EST_HUMAN	z78a11.1 Soares total fetus Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:769740 5'
2314	15328	28349	2.21	0.0E+00	BF347039.1	EST_HUMAN	602021846F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157339 5'
2315	14572	27644	1.36	0.0E+00	M16708.1	NT	Human T-cell receptor gamma chain VJCI-CII-CIII region mRNA, complete cds
2320	15331	28355	1.09	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2321	15332	28356	1.57	0.0E+00	6325466	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA
2327	15338	28361	1.83	0.0E+00	BE976095.1	EST_HUMAN	7722a02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3295370 3' similar to TR:094939 094939 KIAA0857 PROTEIN;
2330	15341	28363	5.18	0.0E+00	AF044571.1	NT	Homo sapiens phosphotyrosine kinase alpha subunit (PHKA2) gene, exon 32
2331	15342	28364	2.11	0.0E+00	AI625542.1	EST_HUMAN	y57c09.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:2283182 3'
2336	15347	28368	1.76	0.0E+00	5903178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2338	15347	28369	1.78	0.0E+00	5903178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2342	15352	28372	1.44	0.0E+00	7682007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA
2342	15352	28373	1.44	0.0E+00	7682007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA
2346	15355	28377	0.97	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2348	15355	28378	0.97	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2358	15365	28386	3.77	0.0E+00	5174878	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2360	15368	28390	1.86	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002064 5'
2361	15369		8.67	0.0E+00	BE794028.1	EST_HUMAN	601596843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941003 5'
2362	15370	28391	1.23	0.0E+00	AW897076.1	EST_HUMAN	MR1-SN0033-120400-002-e04 SN0033 Homo sapiens cDNA
2363	15371	28392	3.7	0.0E+00	7682017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2364	15372	28393	2.27	0.0E+00	4758497	NT	Homo sapiens hexose-8-phosphate dehydrogenase (glucose 1-dehydrogenase) (H8PD), mRNA
2364	15372	28394	2.27	0.0E+00	4758497	NT	Homo sapiens hexose-8-phosphate dehydrogenase (glucose 1-dehydrogenase) (H8PD), mRNA
2365	15373		6.34	0.0E+00	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A6) gene, partial cds
2367	15375	28396	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2367	15375	28397	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2367	15375	28398	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2368	15376	28399	0.86	0.0E+00	8923089	NT	Homo sapiens hypothetical protein FLJ20081 (FLJ20081), mRNA
2424	15431	28453	1.11	0.0E+00	AU119582.1	EST_HUMAN	AU119582 HEMBA1 Homo sapiens cDNA clone HEMBA1006155 5'
2426	15433		4.37	0.0E+00	AJ042035.1	EST_HUMAN	aa0302.x1 Soares NthMIPu_S1 Homo sapiens cDNA clone IMAGE:1660683 3' similar to TR:008662 008662 230KDA PHOSPHATIDYLINOSITOL 4-KINASE.;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2429	15436		1.2	0.0E+00	BE85805.1	EST_HUMAN	601432608F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918188 5'
2439	15446		1.83	0.0E+00	AB005622.1	EST_HUMAN	AB005622 HeLa cDNA (T.Noma) Homo sapiens cDNA similar to adenylylate kinase isozyme 2
2443	15449	28468	5.37	0.0E+00	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2448	15451	28471	2.23	0.0E+00	D85608.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds
2446	15451	28472	2.23	0.0E+00	D85608.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds
2454	15458	28481	3.38	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2459	15463	28486	1.08	0.0E+00	BF345274.1	EST_HUMAN	602018058F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
2466	15470	28494	3.44	0.0E+00	5729777	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
2470	15474	28497	1.27	0.0E+00	BE831003.1	EST_HUMAN	CMD-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2470	15474	28498	1.27	0.0E+00	BE831003.1	EST_HUMAN	CMD-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2475	15479	28502	1.03	0.0E+00	U13668.1	NT	Human G protein-coupled receptor (GPR1) gene, complete cds
2475	15479	28503	1.03	0.0E+00	U13668.1	NT	Human G protein-coupled receptor (GPR1) gene, complete cds
2476	15480	28504	3.72	0.0E+00	BF660144.1	EST_HUMAN	602184558F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'
2486	15490	28514	2.12	0.0E+00	AW468922.1	EST_HUMAN	ha04404.x1 NCI_CGAP_K612 Homo sapiens cDNA clone IMAGE:2872759 3'
2488	15492	28516	3.03	0.0E+00	AW501010.1	EST_HUMAN	UH-HF-BP0p-sis-c-07-Q-U1.1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072780 5'
2513	15516		2.64	0.0E+00	AW918953.1	EST_HUMAN	RC3-ST0187-300300-016-c04 ST0187 Homo sapiens cDNA
2517	15520	28543	11.9	0.0E+00	BE765542.1	EST_HUMAN	601662630F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946518 5'
2518	15521	28544	1.43	0.0E+00	BF509482.1	EST_HUMAN	UH-H-B14-ec2-b-08-Q-U1.st NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086635 3'
2521	15524	28546	2.26	0.0E+00	Z32684.2	NT	Homo sapiens mRNA for membrane transport protein (XK gene)
2523	15526		4.96	0.0E+00	5453871	NT	Homo sapiens platelet-derived growth factor receptor-like (PDGFRL) mRNA
2526	15529	28550	3.66	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2527	15530	28551	2.61	0.0E+00	U03239.1	NT	Human Sec62 (Sec62) mRNA, complete cds
2533	15536	28557	1.6	0.0E+00	BE860490.1	EST_HUMAN	601508211F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908868 5'
2538	15540	28563	6.2	0.0E+00	BE875511.1	EST_HUMAN	601488241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2538	15540	28564	6.2	0.0E+00	BE875511.1	EST_HUMAN	601488241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2539	15541	28565	1.07	0.0E+00	AF114027.1	EST_HUMAN	AF114027 Homo sapiens lung fetus Homo sapiens cDNA clone ESF8
2541	15543	28568	1.11	0.0E+00	AF246505.1	NT	Homo sapiens cardiac mRNA, complete cds
2558	15560	28576	1.25	0.0E+00	BE536921.1	EST_HUMAN	601064738F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451161 5'
2563	15564	28583	3.18	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y78AA1 Homo sapiens cDNA clone Y78AA1001673 5'
2563	15564	28584	3.18	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y78AA1 Homo sapiens cDNA clone Y78AA1001673 5'
2564	15565	28585	1.51	0.0E+00	BE292896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887855 5'
2564	15565	28586	1.51	0.0E+00	BE292896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887855 5'
2565	15566	28587	1.4	0.0E+00	BF223041.1	EST_HUMAN	Tq27h12.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3' similar to TR-O00246 O00246 HYPOTHETICAL 9.3 KD PROTEIN :

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2563	15569	28589	8.56	0.0E+00	AF245505.1	NT	Homo sapiens actin mRNA, complete cds
2569	15590	28607	1.03	0.0E+00	BE286913.1	EST_HUMAN	601173631F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529159 5'
2606	15627	28629	2.16	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2606	15627	28630	2.16	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2607	15608		2.35	0.0E+00	BF513835.1	EST_HUMAN	U1-HBW1-emp-f-12-Q-ULs1 NCJ_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070631 3'
2611	15610	28634	1.01	0.0E+00	BF672818.1	EST_HUMAN	602152553F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283612 5'
2620	15618	28642	1.11	0.0E+00	A1571737.1	EST_HUMAN	In18608.x1 NCJ_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2168055 3' similar to gcl:20877 CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN);
2621	15619	28643	2.57	0.0E+00	5032160	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF2) mRNA
2623	15622	28647	7.78	0.0E+00	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2624	15623	28648	1.25	0.0E+00	BE785445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2624	15623	28649	1.25	0.0E+00	BE785445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2634	15633		8.15	0.0E+00	BE782472.1	EST_HUMAN	601594630F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3939222 5'
2642	15640	28684	2.68	0.0E+00	4504688	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1) mRNA
2653	15650		1.32	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2654	15651	28672	5.99	0.0E+00	AF173227.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2658	15655	28673	110.09	0.0E+00	AB011108.1	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
2661	15658	28676	1.22	0.0E+00	AU133385.1	EST_HUMAN	AU133385 NT2RP4 Homo sapiens cDNA clone NT2RP4001884 5'
2662	15659	28677	0.82	0.0E+00	M68225.1	NT	Human bullous pemphigoid antigen (BPAG1) mRNA, complete cds
2684	15661	28679	1.26	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2684	15661	28680	1.26	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2687	15684	28683	2.07	0.0E+00	AW887015.1	EST_HUMAN	RG1-OT0086-220300-011-d07 OT0086 Homo sapiens cDNA
2670	15667	28686	1.12	0.0E+00	BF000018.1	EST_HUMAN	7015905.x1 NCJ_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3316089 3'
2671	15668	28687	5.39	0.0E+00	BE383165.1	EST_HUMAN	60129874F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628823 5'
2672	15669		3.03	0.0E+00	BE383165.1	EST_HUMAN	601278373F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610267 5'
2709	15703	28719	0.92	0.0E+00	AB037732.1	NT	Homo sapiens mRNA for KIAA1311 protein, partial cds
2732	15726		11.44	0.0E+00	AA316723.1	EST_HUMAN	EST189414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L28
2733	15727	28741	1.11	0.0E+00	BE794884.1	EST_HUMAN	601599625F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
2739	15733	28749	3.65	0.0E+00	U36253.1	NT	Human beta-prime-adipin (BAM22) gene, exon 5
2740	15734	28750	1.05	0.0E+00	7668517	NT	Homo sapiens neurogranin 1 (NRG1), transcript variant SMDF, mRNA
2741	15735	28751	1.6	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds

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2748	15741	28758	8.77	0.0E+00	BE786378.1	EST_HUMAN	60169169F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946983 5'
2751	15903	28762	13.57	0.0E+00	BE563433.1	EST_HUMAN	601335485F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688594 5'
2762	15744		1.22	0.0E+00	AV721847.1	EST_HUMAN	AV721847 HTB Homo sapiens cDNA clone HTBBYE09 5'
2754	15746	28765	2.9	0.0E+00	5174488	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0767) mRNA
2754	15746	28768	2.9	0.0E+00	5174488	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0767) mRNA
2755	15747	28767	0.98	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2755	15747	28768	0.98	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2756	15748	28769	3.23	0.0E+00	AF280195.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2757	15749		48.84	0.0E+00	AV651088.1	EST_HUMAN	AV651088 GLC Homo sapiens cDNA clone GLCQCD07 3'
2758	15750	28770	6.5	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2758	15750	28771	6.5	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2762	15754	28774	0.94	0.0E+00	4757863	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2762	15754	28775	0.94	0.0E+00	4757863	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2766	15758	28780	2.96	0.0E+00	BE747183.1	EST_HUMAN	601580303F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928472 5'
2779	15771		1.71	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2780	15772	28782	4.09	0.0E+00	BF514110.1	EST_HUMAN	U1-HBW1-annw-e-07-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2786	15778		1.02	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2792	15784	28800	1.58	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2792	15784	28801	1.58	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2783	15785	28802	4.03	0.0E+00	BF677694.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249915 5'
2799	15791	28810	1.58	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, I (PTPR), mRNA
2803	15795	28813	15.3	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2803	15795	28814	15.3	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2805	15797		13.6	0.0E+00	A1879163.1	EST_HUMAN	au55604.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2618663 5' similar to
2808	15800	28819	2.83	0.0E+00	BF630691.1	EST_HUMAN	SW_R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A ;
2809	15801	28820	3.53	0.0E+00	BE872788.1	EST_HUMAN	602071957F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4214678 5'
2811	15803	28821	1.98	0.0E+00	AU131494.1	EST_HUMAN	601460912F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3854642 5'
2811	15803	28822	1.98	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2812	15804	28823	34.94	0.0E+00	BE300344.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2812	15804	28824	34.94	0.0E+00	BE300344.1	EST_HUMAN	600844794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:29680808 5'
2817	13290	28216	7.12	0.0E+00	S76830.1	NT	600844794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:29680808 5'
2820	15811		0.75	0.0E+00	AB033281.1	NT	glycoprotein D-Duffy group antigen [human, blood, Genomic DNA, 3088 nt]
2826	13796	26735	1.8	0.0E+00	AF284750.1	NT	Homo sapiens BTRCP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
							Homo sapiens ALR-like protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2826	13788	28738	1.8	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2830	14086	27037	3.41	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2830	14086	27038	3.41	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2847	15907	28832	2.28	0.0E+00	X85980.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene
2848	15908		3.02	0.0E+00	AF068824.1	NT	Homo sapiens 5-aminolevulinic acid synthase 2 (ALAS2) gene, complete cds
2850	15910		1.8	0.0E+00	AB040860.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2852	15912	28835	1.07	0.0E+00	4502568	NT	Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP-10) mRNA
2852	15912	28838	1.07	0.0E+00	4502568	NT	Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP-10) mRNA
2857	15917		0.98	0.0E+00	AJ238852.1	NT	Homo sapiens partial rpl3 gene for ribosomal protein L3, U82 snRNA, U83a snRNA and U83b snRNA genes
2858	15918	28839	3.25	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2862	15922	28842	1.8	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
2865	15925	28844	0.98	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281289-003-e02 HT0343 Homo sapiens cDNA
2865	15925	28845	0.98	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281289-003-e02 HT0343 Homo sapiens cDNA
2867	15927		1.48	0.0E+00	X73428.1	NT	H. sapiens l33 gene for HLH type transcription factor
2868	15928		3.61	0.0E+00	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
2870	15930	28847	1	0.0E+00	M89478.1	NT	Human transglutaminase mRNA, complete cds
2874	15933	28850	25.84	0.0E+00	D50857.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2874	15933	28851	25.84	0.0E+00	D50857.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2877	15938	28854	2.34	0.0E+00	AL088857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2878	15937		5.17	0.0E+00	Y10658.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2879	15938		1.17	0.0E+00	AF152303.1	NT	Homo sapiens protocadherin alpha C1 (PCDH-alpha-C1) mRNA, complete cds
2880	15939	28855	61.62	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2880	15939	28856	61.62	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2891	15950	28866	2.45	0.0E+00	4507280	NT	Homo sapiens serine/threonine kinase 9 (STK9) mRNA
2894	15953	28870	0.81	0.0E+00	AL047599.1	EST_HUMAN	DKFZp568G0621_r1 596 (synonym: huter) Homo sapiens cDNA clone DKFZp568G0621
2895	15954	28871	1.07	0.0E+00	7661983	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2895	15954	28872	1.07	0.0E+00	7661983	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2896	15955		2.07	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2898	15957	28874	5.43	0.0E+00	BE081898.1	EST_HUMAN	QV2-BT0636-130400-139-H03 BT0636 Homo sapiens cDNA
2898	15957	28875	5.43	0.0E+00	BE081898.1	EST_HUMAN	QV2-BT0636-130400-139-H03 BT0636 Homo sapiens cDNA
2903	15962	28883	0.63	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2803	15962	28984	0.63	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2808	15965	28988	2.62	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21O008
2808	15965	28988	2.62	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21O008
2807	15966	28989	0.94	0.0E+00	AA215576.1	EST_HUMAN	z198b11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683517 3' similar to contains Alu repetitive element
2815	15973	28990	4.07	0.0E+00	Y18210.1	NT	Homo sapiens H1h5 gene for hair keratin, exons 1 to 9
2818	15976	28990	1.17	0.0E+00	4758279	NT	Homo sapiens EPHA4 (EPHA4) mRNA
2819	15977	28991	23.04	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2820	15978	28992	0.92	0.0E+00	AI561002.1	EST_HUMAN	t118d07.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2187881 3' similar to TR-O18247
2820	15978	28993	0.92	0.0E+00	AI561002.1	EST_HUMAN	O16247 F44E7.2 PROTEIN.;
2822	15980	28995	0.97	0.0E+00	AF152338.1	NT	t118d07.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2187881 3' similar to TR-O18247
2831	15989	28910	1.26	0.0E+00	AI209084.1	EST_HUMAN	Homo sapiens proteodherin gamma C4 (PCDH-gamma-C4) mRNA, complete cds
2839	15997	28918	2.92	0.0E+00	AB033093.1	NT	q94904.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838527 3' similar to SW:CB20_HUMAN P52298 20 KD NUCLEAR CAP BINDING PROTEIN.;
2839	15997	28919	2.92	0.0E+00	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2840	15998	28920	4.91	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2840	15998	28921	4.91	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2843	16001	28924	2.56	0.0E+00	7881903	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2843	16001	28925	2.56	0.0E+00	7881903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2844	16002	28926	2.73	0.0E+00	5174574	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2844	16002	28927	2.73	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2856	16014	28941	2.36	0.0E+00	4505084	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2856	16014	28942	2.36	0.0E+00	4505084	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2856	16023	28948	1.71	0.0E+00	4758827	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2856	16024	28949	1.03	0.0E+00	X98494.1	NT	Homo sapiens neurexin III (NRXN3) mRNA
2856	16024	28949	1.03	0.0E+00	X98494.1	NT	H. sapiens mRNA for M phase phosphoprotein 10
2871	16029	28952	7.63	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2885	16043	28973	1.1	0.0E+00	AI149880.1	EST_HUMAN	qf43f09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809 3'
2894	16052	28974	0.97	0.0E+00	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
2895	16053	28974	2.71	0.0E+00	AB004884.1	NT	Homo sapiens mRNA for PKU-alpha, partial cds
3007	16065	28984	1.51	0.0E+00	7662273	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3008	16068	28985	1.98	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3008	16068	28986	1.98	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3016	16074	28994	0.95	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3016	16074	28995	0.95	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3038	16096		0.74	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3040	16098	29014	1.28	0.0E+00	M74099.1	NT	Human displacement protein (CCAAT) mRNA
3050	16107	29021	0.88	0.0E+00	4506882	NT	Homo sapiens semaphorin 1 (SEMG1) mRNA
3052	16108	29023	0.76	0.0E+00	AW976296.1	EST_HUMAN	ESTS89376 MAGC resequences, MAGN Homo sapiens cDNA
3057	16114		4.37	0.0E+00	AF189593.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3060	16117	29031	15.24	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3060	16117	29032	15.24	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3062	16119		6.14	0.0E+00	AL359403.1	NT	Isaform 2 of a novel human mRNA from chromosome 22
3068	16123	29036	2.48	0.0E+00	AF017433.1	NT	Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
							Homo sapiens transcription factor IGHM enhancer 3, JH11 protein, JH4 protein, JH5 protein, T54 protein, JH10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel α
3069	16126		1.68	0.0E+00	AF198779.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
3084	16141	29052	0.73	0.0E+00	AF170492.1	NT	Human germline gene 18.1 for Ig lambda L-chain C region (Igl-C18.1)
3082	16150	29064	12.69	0.0E+00	X035529.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3088	16155		1.77	0.0E+00	AF198355.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
3102	16159	29071	1.71	0.0E+00	AF084589.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3123	16180	29090	4.2	0.0E+00	AF266208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3124	16181	29091	4.68	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3129	16186	29096	2.83	0.0E+00	7862139	NT	Homo sapiens KIAA0469 gene product (KIAA0469), mRNA
3130	16187	29098	1.58	0.0E+00	AF042076.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 428) gene, OLFR 428-9110 allele, partial cds
							Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3157	16213	29128	4.32	0.0E+00	4828783	NT	Human ferritin heavy chain mRNA, complete cds
3165	16220	29135	22.34	0.0E+00	L20941.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3168	16223	29138	1.3	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3168	16223	29139	1.3	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
							ye32203.s1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:118453 3' similar to SP:S28538
3174	16229	29145	21.23	0.0E+00	T94870.1	EST_HUMAN	S28538 BASIC PROTEIN, 23K - ;
3190	16245	29163	1.13	0.0E+00	BF243338.1	EST_HUMAN	601878507F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107433 5'
3192	16247	29164	1.11	0.0E+00	A1968096.1	EST_HUMAN	wu12h10.x1 NCI CGAP_GC8 Homo sapiens cDNA clone IMAGE:2516803 3'
3197	16252	29171	4.28	0.0E+00	X86922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase

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Probe SEQ ID NO:	Exon SEQ ID NO:	RF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3197	16252	29172	4.28	0.0E+00	X98922.1	NT	H.sapiens mRNA for gamma-glutamyltransferase
3207	16262	29183	1.16	0.0E+00	4759827	NT	Homo sapiens neurodin III (NRXN3) mRNA
3207	16262	29184	1.16	0.0E+00	4759827	NT	Homo sapiens neurodin III (NRXN3) mRNA
3213	16268	29191	9.81	0.0E+00	4504968	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3230	16285	29208	3.9	0.0E+00	M28698.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
3234	16289	29211	1.55	0.0E+00	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleoside translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3240	16295	29219	0.98	0.0E+00	4759055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3240	16296	29220	0.98	0.0E+00	4759055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3242	16297	29221	3.36	0.0E+00	AA774783.1	EST_HUMAN	ae87b11.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:971133 3'
3250	16305	29229	3.58	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3250	16305	29230	3.58	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3261	16316	29236	1.16	0.0E+00	4567690	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3267	16321	29243	1.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3275	16329	29250	1.04	0.0E+00	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SK12W), RD, complement factor B (Bf), and complement component C2 (C2) genes, >
3278	16332	29253	4.45	0.0E+00	AF059094.1	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3288	16312	29281	2.4	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3288	16312	29282	2.4	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3303	16356	29275	2.89	0.0E+00	AF265208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3304	16357	29278	0.86	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
3335	16389	29307	2.87	0.0E+00	AI589294.1	EST_HUMAN	t68f08.x2 NCI CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2222535 3' similar to SW.FL11_RAT
3343	16394	29315	2.44	0.0E+00	AF128893.1	NT	P25121 60S RIBOSOMAL PROTEIN L11, contains Alu repetitive element
3343	16394	29316	2.44	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3344	16395	29317	0.85	0.0E+00	7657213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3344	16395	29318	0.85	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3346	16397	29319	1.11	0.0E+00	4502582	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3346	16397	29320	1.11	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3349	16400	29322	10.77	0.0E+00	AF111163.1	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3351	16402	29324	1.09	0.0E+00	AB040940.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
3358	16408	29330	0.85	0.0E+00	BE779039.1	EST_HUMAN	Homo sapiens mRNA for KIAA1507 protein, partial cds
							601464956F1 NIH_MGC_97 Homo sapiens cDNA clone IMAGE:3888246 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3369	18419	29344	0.78	0.0E+00	A1832598.1	EST_HUMAN	wb1004.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2305279 3' similar to TR:Q81829 Q81829
3407	18458	29379	4.18	0.0E+00	AU123684.1	EST_HUMAN	ZINC FINGER PROTEIN.;
3414	18462	29382	1.15	0.0E+00	7363438	NT	AU123684 NT2RM2 Homo sapiens cDNA clone NT2RM2000735 5'
3414	18462	29383	1.15	0.0E+00	7363438	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3417	18465	29385	6.29	0.0E+00	7708239	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3418	18468	29388	1.51	0.0E+00	AF211188.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
3436	18483	29401	1.13	0.0E+00	7682401	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1I-a isoform (CACNA1I) mRNA, complete cds
3438	18483	29402	1.13	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3437	18484	29403	1.05	0.0E+00	4502398	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3441	18488	29406	2.77	0.0E+00	5903067	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3450	15735	29751	1.38	0.0E+00	AF110763.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA
3455	18501	29419	2.15	0.0E+00	7657038	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
3456	18502	29420	1.05	0.0E+00	5453965	NT	Homo sapiens death receptor 6 (DR6), mRNA
3458	18502	29421	1.05	0.0E+00	5453966	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3459	18505	29425	1	0.0E+00	AJ277276.1	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3459	18505	29426	1	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
3480	18508	29427	5.55	0.0E+00	K02380.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
3483	18509	29430	1.31	0.0E+00	7427522	NT	Bacteriophage P1 replication region including repA, parA, and parB genes and IncA, IncB, and IncC incompatibility determinants
3469	18515	29435	5.12	0.0E+00	A1835158.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
3469	18516	29436	5.12	0.0E+00	A1835158.1	EST_HUMAN	wb14d10.x1 NCI CGAP Lu19 Homo sapiens cDNA clone IMAGE:2484819 3' similar to TR:O73634 O73634
3473	18519	29441	1.68	0.0E+00	AJ278120.1	NT	NEURAL CELL ADHESION MOLECULE.;
3478	18525	29449	6.24	0.0E+00	6552332	NT	NEURAL CELL ADHESION MOLECULE.;
3479	18525	29450	6.24	0.0E+00	6552332	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
3485	18531	29456	1.06	0.0E+00	M14123.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3489	18536	29461	6.79	0.0E+00	U43283.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3497	18544	29469	1.85	0.0E+00	AFO45452.1	NT	Human endogenous retrovirus HERV-K10
3497	18544	29470	1.85	0.0E+00	AFO45452.1	NT	Human MDS1A (AML1/MD51 fusion) mRNA, partial cds
3504	18551	29478	0.89	0.0E+00	AF231922.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
							Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
							Homo sapiens chromosome 21 unknown mRNA

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3516	16562	29486	2.29	0.0E+00	BE304791.1	EST_HUMAN	601143953F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3516	16562	29487	2.29	0.0E+00	BE304791.1	EST_HUMAN	601143953F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3519	16565	29490	1.07	0.0E+00	4826785	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2) mRNA
3521	16567	29491	1.24	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATORY PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3526	16572	29495	0.88	0.0E+00	AI384007.1	EST_HUMAN	ts85g12.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:000498
3529	16576	29498	1.08	0.0E+00	M10978.1	NT	000498 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN :
3543	16589	29513	0.92	0.0E+00	AB032979.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
3543	16589	29514	0.92	0.0E+00	AB032979.1	NT	Homo sapiens mRNA for KIAA1153 protein, partial cds
3561	16597	29522	1.38	0.0E+00	AV701869.1	EST_HUMAN	Homo sapiens mRNA for KIAA1153 protein, partial cds
3562	16598	29523	0.92	0.0E+00	4506884	NT	AV701869 ADB Homo sapiens cDNA clone ADBDAH06 5'
3564	16600	29531	1.03	0.0E+00	AF078868.1	NT	Homo sapiens semenogelin II (SEMG2) mRNA
3563	16609	29531	0.82	0.0E+00	AL133204.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
3567	16612	29534	1.21	0.0E+00	AB040809.1	NT	Novel human gene mapping to chromosome X
3578	16623	29544	1.33	0.0E+00	8823087	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3588	16633	29551	1.16	0.0E+00	6097248	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
3588	16633	29552	1.16	0.0E+00	6097248	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3590	16635	29555	1.06	0.0E+00	6325463	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3595	16640	29555	4.69	0.0E+00	AW852217.1	EST_HUMAN	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3602	16647	29564	1.35	0.0E+00	AF118846.1	NT	QVD-CT0225-230300-169-e01 CT0225 Homo sapiens cDNA
3603	16648	29564	10.61	0.0E+00	BF676393.1	EST_HUMAN	Homo sapiens gamma-glutamylcysteine synthetase (GLC) gene, partial cds
3617	16661	29579	1.04	0.0E+00	AW637977.1	EST_HUMAN	602084583F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248588 5'
3629	16672	29585	1.46	0.0E+00	BF672054.1	EST_HUMAN	QVD-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3629	16672	29586	1.46	0.0E+00	BF672054.1	EST_HUMAN	602152488F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293845 5'
3630	16673	29586	0.84	0.0E+00	4826867	NT	602152488F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293845 5'
3632	16675	29588	0.84	0.0E+00	AW684693.1	EST_HUMAN	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
3632	16675	29589	0.84	0.0E+00	AW684693.1	EST_HUMAN	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3636	16679	29593	0.83	0.0E+00	4826763	NT	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3638	16681	29596	1.03	0.0E+00	7682319	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (H3SST1) mRNA
3646	16689	29604	0.67	0.0E+00	4557752	NT	Homo sapiens KIAA0808 gene product (KIAA0808), mRNA
3646	16689	29605	0.67	0.0E+00	4557752	NT	Homo sapiens midline 1 (OptizBBB syndrome) (MID1) mRNA
3661	16704	29618	3.11	0.0E+00	D87327.1	NT	Homo sapiens midline 1 (OptizBBB syndrome) (MID1) mRNA
3664	16707	29637	10.78	0.0E+00	7689461	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3681	16724	29637	16.15	0.0E+00	AB026542.1	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
							Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3685	16728	29639	4.02	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3685	16728	29640	4.02	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3682	16735	29647	1.8	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3682	16735	29648	1.8	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3685	16738	29651	1.34	0.0E+00	AW851714.1	EST_HUMAN	MR2-CTD222-281098-005-e05 CT0222 Homo sapiens cDNA
3697	16740	29653	2.88	0.0E+00	5728928	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3699	16742	29655	1.37	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0768 protein, partial cds
3701	16744	29657	0.72	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNG HOMOLOG 1) (HA2303)
3703	16746	29659	1.45	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3703	16746	29660	1.45	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3705	16748	29662	1	0.0E+00	7662237	NT	Homo sapiens KIAA0670 protein/actin (KIAA0670), mRNA
3705	16748	29663	1	0.0E+00	7662237	NT	Homo sapiens KIAA0670 protein/actin (KIAA0670), mRNA
3719	16762	29672	4.8	0.0E+00	AW298134.1	EST_HUMAN	UHF-BW0-eps-e-12-0-Ji.61 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3719	16762	29673	4.8	0.0E+00	AW298134.1	EST_HUMAN	UHF-BW0-eps-e-12-0-Ji.61 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3742	16784	29698	1.47	0.0E+00	AB004630.1	NT	Human gene for Type XX collagen a1 chain, exon 6
3743	16785	29697	1.08	0.0E+00	AA463659.1	EST_HUMAN	aa06g01.1 Soares_NHMPJ_S1 Homo sapiens cDNA clone IMAGE:812498 5' similar to SW_KRBA_SHEEP P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIB4, [1] ;
3747	16789	29701	0.78	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3750	16792	29703	3.92	0.0E+00	7667468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3760	16801	29713	0.77	0.0E+00	AB037635.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3772	16814	29723	5.64	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3776	16817	29728	18.76	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3781	16822	29729	0.97	0.0E+00	7667065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3781	16822	29730	0.97	0.0E+00	7667065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3784	16825	29733	0.92	0.0E+00	4505594	NT	Homo sapiens plasminogen activator inhibitor, type II (arginine-serpin) (PAI2) mRNA
3834	16874	29775	3.15	0.0E+00	AF178733.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3837	16877	29779	2.78	0.0E+00	7667468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3837	16877	29780	2.78	0.0E+00	7667468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3843	16883	29787	0.91	0.0E+00	AF127851.1	NT	Gorilla gorilla olfactory receptor (GGOT1) gene, partial cds
3843	16883	29788	0.91	0.0E+00	AF127851.1	NT	Gorilla gorilla olfactory receptor (GGOT1) gene, partial cds
3844	16884	29789	1.01	0.0E+00	A1377699.1	EST_HUMAN	ta62f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2091307 3'
3845	16885		1.81	0.0E+00	AF152498.1	NT	Homo sapiens protocadherin beta 3 (PCDH-beta3) mRNA, complete cds
3846	16886	29780	0.97	0.0E+00	4758189	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3850	16890	28794	16.29	0.0E+00	S76895.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ9/BIR1) gene, complete cds
3852	16892	28796	2.25	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA
3853	16893	28797	1.54	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3857	16897	28800	1.1	0.0E+00	4504534	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1D (HTR1D) mRNA
3862	16901	28805	1.15	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
3862	16901	28806	1.15	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
3863	16902	28807	0.77	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
3868	16907	28815	7.17	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3868	16907	28816	7.17	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3870	16909	28819	4.34	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134, mRNA, complete cds
3871	16910	28820	1.13	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3874	16913	28822	1.29	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3877	16916	28825	1.3	0.0E+00	AF012615.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3878	16917	28826	2.38	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP128), mRNA
3880	16919	28828	0.73	0.0E+00	AF089117.1	NT	Homo sapiens amphiphysin gene, partial cds
3888	16929	28838	2.34	0.0E+00	AB94727.1	EST_HUMAN	wk0101.x1 NCI_OGAP_Lym12 Homo sapiens cDNA clone IMAGE:2411065 3' similar to TR-O43340
3892	16932	28842	13.72	0.0E+00	4506742	NT	O43340 R28830_2 ;contains element PTR7 repetitive element ;
3897	16937	28848	1.39	0.0E+00	AL040338.1	EST_HUMAN	Homo sapiens ribosomal protein S8 (RPS8), mRNA
3903	16943	28855	1.34	0.0E+00	6005887	NT	DKFZp434N0413_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0413 5'
3903	16943	28856	1.34	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3904	16944	28857	1.78	0.0E+00	4504138	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3906	16946		1.75	0.0E+00	4505078	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3910	16950	28861	1.06	0.0E+00	AF149412.1	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3924	16964	28877	1.17	0.0E+00	4506758	NT	Homo sapiens HBP17 heparin-binding and EGF-binding protein gene, complete cds
3928	16968	28881	1.3	0.0E+00	4585842	NT	Homo sapiens ryonodine receptor 3 (RYR3) mRNA
3936	16976	28890	1.64	0.0E+00	BF355295.1	EST_HUMAN	Homo sapiens zinc finger protein (KIAA0412) mRNA
3937	16977	28891	1.05	0.0E+00	AW888221.1	EST_HUMAN	RC3-HT0860-170800-011-rt12 HT0860 Homo sapiens cDNA
3937	16977	28892	1.05	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1696728 similar to MXRA5
3947	16987	28902	1.85	0.0E+00	AF129533.1	NT	Matrix remodeling associated gene 5
							MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1696728 similar to MXRA5
							Matrix remodeling associated gene 5
							Homo sapiens F-box protein F33b (FBL3B) mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3952	16992	29908	3.36	0.0E+00	BE378602.1	EST_HUMAN	801236936F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
3961	17001	29916	1.08	0.0E+00	AW580740.1	EST_HUMAN	PM3-LT0031-100100-003-H09 LT0031 Homo sapiens cDNA
4000	17039	29945	5.21	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4000	17039	29946	5.21	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4010	17049		3.56	0.0E+00	M23910.1	NT	Human MHC class II lymphocyte antigen DP44-beta-2 pseudogene, exon 2
4013	17052		6.54	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4022	17060	29961	3.12	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4031	17068	29970	1.59	0.0E+00	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
4036	17074	29974	0.89	0.0E+00	S78653.1	NT	mrg-mas-related [human, Genomic, 2416 nt]
4047	17085		56.15	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4054	17091		1.47	0.0E+00	AI657076.1	EST_HUMAN	tt56g08.x1 NC1_CGAP_GC08 Homo sapiens cDNA clone IMAGE:2244734 3' similar to TR:060309 060309 KIAA0563 PROTEIN. ;
4057	17093	29988	1.13	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
4058	17094	29989	1.67	0.0E+00	U09366.1	NT	Human zinc finger protein ZNF133
4076	17111	30007	5.87	0.0E+00	AB015610.1	NT	Chlorobacter ethiops mRNA for ribosomal protein S6X, complete cds
4085	17119		3.81	0.0E+00	AL238917.1	NT	Homo sapiens mRNA for UGA suppressor RNA-associated antigenic protein (RNA48 gene)
4083	17127	30020	1.14	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4094	17128	30021	2.67	0.0E+00	AJ277278.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4094	17128	30022	2.67	0.0E+00	AJ277278.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4100	17134	30028	7.81	0.0E+00	5032028	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4100	17134	30029	7.81	0.0E+00	5032028	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4111	17145	30039	1.27	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
4117	17150	30042	4.96	0.0E+00	4885306	NT	phosphoribosylmethionine synthetase (GART) mRNA
4118	17151	30043	1.32	0.0E+00	AB006625.1	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4121	17154	30044	7.49	0.0E+00	11419297	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4122	17155	30045	2.95	0.0E+00	AL098957.1	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA
4123	17156		1.21	0.0E+00	AA018975.1	EST_HUMAN	z5c5e09.r1 Scores retina N2b-4HR Homo sapiens cDNA clone IMAGE:362820 5' similar to coriflins Alu repetitive element
4129	17162	30051	3.26	0.0E+00	AF165527.1	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4138	14177	27127	1.62	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRICK) mRNA
4138	14177	27128	1.62	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRICK) mRNA
4143	17175	30063	1.26	0.0E+00	5801906	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
4144	17176	30064	1.09	0.0E+00	4503954	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4144	17178	30065	1.09	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
4146	16598	29523	0.86	0.0E+00	4508884	NT	Homo sapiens serpinogen II (SEMG2), mRNA
4148	17179	30067	0.8	0.0E+00	8822391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4148	17179	30068	0.8	0.0E+00	8822391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4153	17184	30071	0.66	0.0E+00	AB020702.1	NT	Homo sapiens mRNA for KIAA0885 protein, partial cds
4159	17190	30078	4.7	0.0E+00	AI982597.1	EST_HUMAN	wu044004.x1 NC1_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2516975 3'
4159	17190	30079	4.7	0.0E+00	AI982597.1	EST_HUMAN	wu044004.x1 NC1_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2516975 3'
4161	17192	30081	1.2	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-e02 HT0707 Homo sapiens cDNA
4161	17192	30082	1.2	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-e02 HT0707 Homo sapiens cDNA
4165	17196		3.98	0.0E+00	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867860 5'
4170	17201	30087	0.93	0.0E+00	AB032861.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4170	17201	30088	0.93	0.0E+00	AB032861.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4172	17203	30080	1.02	0.0E+00	4507478	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGMB3)
4173	17204	30091	2.64	0.0E+00	5729725	NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4174	17205		1.13	0.0E+00	AL132369.1	NT	Novel human gene on chromosome 20
4183	17214		5.1	0.0E+00	AW675599.1	EST_HUMAN	ba51f04.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800095 3' similar to SW-TH12_BOVIN
4188	17219	30106	1.12	0.0E+00	AW408788.1	EST_HUMAN	Q95108 MITOCHONDRIAL THIOREDOXIN PRECURSOR ;
4190	17221	30109	1.23	0.0E+00	8822468	NT	UJHF-BMD-edx-c-02-Q-UJr1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063147 5'
4190	17221	30110	1.23	0.0E+00	8822468	NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4200	17231		4.37	0.0E+00	5174632	NT	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly, sea urchin homolog)-like (PKDREJ) mRNA
4220	17249	30133	9.8	0.0E+00	AA401438.1	EST_HUMAN	zu08h07.a1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu
4220	17249	30134	9.8	0.0E+00	AA401438.1	EST_HUMAN	repetitive element/contains element MER35 repetitive element ;
4235	17284	30149	1.04	0.0E+00	4507720	NT	zu08h07.a1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu
4235	17284	30150	1.04	0.0E+00	4507720	NT	repetitive element/contains element MER35 repetitive element ;
4258	17287		0.87	0.0E+00	AL163303.2	NT	Homo sapiens titin (TTN) mRNA
4286	17315	30194	1.26	0.0E+00	ALJ003145.1	NT	Homo sapiens titin (TTN) mRNA
4302	17331	30211	2.19	0.0E+00	J02810.1	NT	Homo sapiens chromosome 21 segment HS21C103
4317	17346	30230	0.87	0.0E+00	AW836889.1	EST_HUMAN	Homo sapiens mRNA for effector receptor protein, pseudogene
4322	17351	30236	0.74	0.0E+00	4828827	NT	Human apolipoprotein B-100 mRNA, complete cds
							PM2-DT0023-080300-004-e08 DT0023 Homo sapiens cDNA
							Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4322	17351	30237	0.74	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4324	17353	30239	3.59	0.0E+00	AF174590.1	NT	Homo sapiens F-box protein FB4 (FBL4) mRNA, partial cds
4332	17360		2.63	0.0E+00	AI189844.1	EST_HUMAN	q423706.x1 Soares_placenta_8tc9weeks_2nbHP8c9W Homo sapiens cDNA clone IMAGE:1724578 3'
4338	17363		5.62	0.0E+00	U14820.1	NT	similar to contains MER20.b2 MER20 repetitive element;
4347	17374	30254	0.92	0.0E+00	4505646	NT	Human CBFAS (Cbfa3) gene, partial cds
4353	17380	30261	0.77	0.0E+00	6563394	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
4353	17380	30262	0.77	0.0E+00	6563394	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4359	17386	30268	1.16	0.0E+00	U10991.1	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4359	17386	30269	1.15	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4369	17396	30275	8.53	0.0E+00	6912281	NT	Human G2 protein mRNA, partial cds
4387	17415		1.12	0.0E+00	AF153047.2	NT	Homo sapiens COMPLEMENT COMPONENT G1q RECEPTOR (C1QR), mRNA
4392	17420	30303	11.19	0.0E+00	U03901.1	NT	Homo sapiens gap junction protein connexin-36 (CX36) gene, complete cds
4398	17426	30310	4.52	0.0E+00	L14581.1	NT	Human Ig light chain VL1 region gamma (humt1c2b) gene, partial cds
4402	17430	30315	6.76	0.0E+00	Z80780.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4402	17430	30316	6.76	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4408	17436	30322	1.31	0.0E+00	X60483.1	NT	H. sapiens H2B/h gene
4408	17436	30323	1.31	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 Histone
4413	17440	30329	9.47	0.0E+00	7682091	NT	H. sapiens H4/d gene for H4 Histone
4413	17440	30330	9.47	0.0E+00	7682091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4423	17450	30341	1.22	0.0E+00	X82338.1	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4426	17453	30345	15	0.0E+00	4885128	NT	Homo sapiens Menkes disease gene, exon 4
4427	17454	30346	1.23	0.0E+00	A1271738.1	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4430	17457	30348	1.01	0.0E+00	AB037781.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
4463	17489	30378	1.2	0.0E+00	7018456	NT	Homo sapiens mRNA for KIAA1360 protein, partial cds
4471	17497		5.71	0.0E+00	AF165953.1	NT	Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA
4478	17502	30388	1.53	0.0E+00	A1249785.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPPEP2) gene, complete cds
4478	17502	30387	1.53	0.0E+00	A1249785.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4480	17505	30393	0.88	0.0E+00	W28179.1	EST_HUMAN	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4480	17505	30394	0.88	0.0E+00	W28179.1	EST_HUMAN	24q7 Human refina cDNA randomly primed sublibrary Homo sapiens cDNA
4485	17520		2.47	0.0E+00	AF200929.1	NT	24q7 Human refina cDNA randomly primed sublibrary Homo sapiens cDNA
4514	17539	30424	0.63	0.0E+00	T10233.1	EST_HUMAN	Homo sapiens HPS1 gene, intron 5
4514	17539	30425	0.63	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cct8-HAP-Ft Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F205 5'
4514	17539	30425	0.63	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cct8-HAP-Ft Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F205 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4517	17542		0.9	0.0E+00	M14123.1	NT	Human endogenous retrovirus HIV-K10
4529	17553	30441	3.45	0.0E+00	AW084964.1	EST_HUMAN	xc88a08.x1 NCL_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:2589446 3' similar to SW-AHINK_HUMAN
4631	18318		1.85	0.0E+00	8051619	NT	Q08686 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNAK ; Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA
4633	17556	30444	1.09	0.0E+00	A1698698.1	EST_HUMAN	wc56b02.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2322903 3' similar to contains MER22.b2
4637	17560		8.59	0.0E+00	AL163207.2	NT	PTR5 repetitive element ;
4639	17562	30449	1.86	0.0E+00	AW381570.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C007
4645	17568	30456	1.2	0.0E+00	AJ278120.1	NT	PM1-HT0305-101189-002-003 HT0305 Homo sapiens cDNA
4646	17568	30457	1.2	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4647	17570	30459	1.73	0.0E+00	4758467	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4648	17571	30460	2.8	0.0E+00	AF108830.1	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
4653	17576	30466	0.94	0.0E+00	Z66938.1	NT	Homo sapiens serine-threonine protein kinase (MINK) mRNA, complete cds
4654	17577	30467	0.96	0.0E+00	4506852	NT	H. sapiens pancreatic polypeptide receptor PP1 gene
4659	17582	30473	0.93	0.0E+00	S78694.1	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminatase alpha-2,6-sialyltransferase, GD3 synthase) (SIAT8) mRNA
4660	17583	30474	1.91	0.0E+00	AF111163.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
4660	17583	30475	1.91	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4670	18319	30486	2.31	0.0E+00	6005973	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4676	17597	30491	6.31	0.0E+00	AF208161.1	NT	Homo sapiens zinc finger protein 195 (ZNF195), mRNA
4682	17604	30501	1.32	0.0E+00	6454175	NT	Homo sapiens synectin precursor, mRNA, complete cds
4695	17616	30510	30.53	0.0E+00	4503470	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4806	17626	30518	1.82	0.0E+00	4503068	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4610	17631	30524	1.4	0.0E+00	4502558	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
4614	17635		2.89	0.0E+00	L35485.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4616	17637	30526	13.95	0.0E+00	7662091	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4618	17637	30527	13.95	0.0E+00	7662091	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4632	17653	30540	1.97	0.0E+00	AF149314.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4635	17656	30543	10.93	0.0E+00	AJ245418.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4635	17656	30544	10.93	0.0E+00	AJ245418.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4637	17658	30545	1.21	0.0E+00	AB018338.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA
4645	17666		46.99	0.0E+00	D87675.1	NT	Homo sapiens calcitonin receptor-like receptor 4 (melanoma-associated) (CSPG4), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4654	17676		1.61	0.0E+00	AA174072.1	EST_HUMAN	zp18g08.s1 Stratiogene fetal retina 837202 Homo sapiens cDNA clone IMAGE:608854 3'
4656	17677		1.62	0.0E+00	7657410	NT	Homo sapiens cdz (odd Ozhen-m, Drosophila) homolog 1 (ODZ1), mRNA
4658	17679		2.06	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4659	17680	30565	0.95	0.0E+00	H82741.1	EST_HUMAN	y62b01.s1 Soares_pineal_gland_N3-PPG Homo sapiens cDNA clone IMAGE:231721 3'
4659	17680	30568	0.85	0.0E+00	H82741.1	EST_HUMAN	y62b01.s1 Soares_pineal_gland_N3-PPG Homo sapiens cDNA clone IMAGE:231721 3'
4660	17681	30567	1.42	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4661	17682	30568	6.63	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4662	17683		1.84	0.0E+00	AB037821.1	NT	Homo sapiens gene for natriuretic protein, partial cds
4664	17685	30569	0.86	0.0E+00	AF165658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
4669	17690	30576	1.04	0.0E+00	AL162331.1	NT	Novel human gene mapping to chromosome 1
4672	17693	30579	1.89	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4672	17693	30580	1.89	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4673	17694	30581	1.26	0.0E+00	AF167441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4682	17703	30592	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4682	17703	30593	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4682	17703	30594	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4683	17704	30595	2.03	0.0E+00	AB028870.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4683	17704	30596	2.03	0.0E+00	AB028870.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4688	17709	30602	6.02	0.0E+00	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
							Homo sapiens truncated tenascin XB (TNXB) gene, partial cds and TNXA gene recombination breakpoint region
4699	17720		2.24	0.0E+00	AF089041.1	NT	
4704	17725	30619	2.92	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4704	17726	30620	2.92	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4705	17728	30621	3.31	0.0E+00	M74089.1	NT	Human displacement protein (GCAA1) mRNA
4709	17730	30624	2.42	0.0E+00	64533812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4709	17730	30625	2.42	0.0E+00	64533812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4711	19244	26174	2.02	0.0E+00	T56945.1	EST_HUMAN	y83g04.12 Stratiogene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:88310 5'
4711	13244	26175	2.02	0.0E+00	T56945.1	EST_HUMAN	y83g04.12 Stratiogene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:88310 5'
4713	17733		1.22	0.0E+00	BE278730.1	EST_HUMAN	601189335F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3505521 5'
4737	17757	30651	4.85	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EV2B), mRNA
4737	17757	30652	4.85	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EV2B), mRNA
4743	17763	30657	5.55	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
4746	17766	30660	6.62	0.0E+00	M69197.1	NT	Human heptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds
4746	17766	30661	6.62	0.0E+00	M69197.1	NT	Human heptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4760	17770	30688	2.21	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4762	17772	30688	24.83	0.0E+00	7682479	NT	Homo sapiens KIAA1084 protein (KIAA1084), mRNA
4764	17774	30688	2.9	0.0E+00	7682181	NT	Homo sapiens KIAA0933 gene product (KIAA0933), mRNA
4760	17780	30676	0.98	0.0E+00	S71446.1	NT	SCN1A-brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) (human, placenta, Genomic, 1556 nt)
4760	17780	30676	0.98	0.0E+00	S71448.1	NT	SCN1A-brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) (human, placenta, Genomic, 1556 nt)
4765	17785	30681	0.98	0.0E+00	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4770	17790		1.26	0.0E+00	X58467.1	NT	Human CYP2D7AP pseudogene for cytochrome P450 2D6
4781	17801	30691	0.81	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4781	17801	30692	0.81	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4792	17809	30701	1.56	0.0E+00	AF026801.1	NT	Homo sapiens alpha-3 type IX collagen (COL9A3) gene, promoter region, and exons 1-28
4795	17812	30704	1.12	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4795	17812	30706	1.12	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4797	17814	30707	1.12	0.0E+00	7018320	NT	Homo sapiens protein0008 (AD013), mRNA
4797	17814	30708	1.12	0.0E+00	7018320	NT	Homo sapiens protein0008 (AD013), mRNA
4825	17842	30740	1.49	0.0E+00	AW444637.1	EST_HUMAN	U1-HB3-gw-c-04-O-UI.e1 NCI CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
4831	17848	30749	0.89	0.0E+00	AF303134.1	NT	Homo sapiens aldehyde dehydrogenase 12 (ALDH12) mRNA, complete cds
4832	17849		1.83	0.0E+00	AF083242.1	NT	Homo sapiens HSPC024-iso mRNA, complete cds
4873	17890	30778	0.88	0.0E+00	J00191.1	NT	Human MHC class I transplantation antigen (hla) gene
4873	17890	30778	0.88	0.0E+00	J00191.1	NT	Human MHC class I transplantation antigen (hla) gene
4879	17896		4.84	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4882	17899	30788	1.6	0.0E+00	X87205.1	NT	M.fascicularis mRNA for metalloprotease-like, disintegrin-like protein, IVa
4884	17901	30790	0.93	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSOR9) mRNA, complete cds
4885	17902	30791	1.29	0.0E+00	AF097416.1	NT	Mus musculus zinc finger transcription factor Kaiso mRNA, complete cds
4886	17903	30792	3.04	0.0E+00	4503788	NT	Homo sapiens fragile X mental retardation 2 (FMR2) mRNA
4888	17905	30794	13.14	0.0E+00	4385048	NT	Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA
4889	17906	30795	1.37	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4891	17908	30797	1.65	0.0E+00	8922180	NT	Homo sapiens hypothetical protein DKFZp762E1312 (DKFZp762E1312), mRNA
4894	17911	30801	4.6	0.0E+00	8923080	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
4898	17915	30805	1.75	0.0E+00	MB4081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4898	17915	30806	1.75	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4900	17917	30808	1.49	0.0E+00	X94628.1	NT	H.sapiens MeCP-2 gene
4900	17917	30809	1.49	0.0E+00	X94628.1	NT	H.sapiens MeCP-2 gene
4903	17920	30812	2.38	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C0380
4912	17929	30820	1.16	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF21) mRNA
4921	17938	30830	1.59	0.0E+00	X92841.1	NT	H.sapiens MICA gene
4923	17940	30832	1.34	0.0E+00	4585642	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
4924	17941	30833	0.69	0.0E+00	AB037864.1	NT	Homo sapiens mRNA for KIAA1443 protein, partial cds
4925	17942	30834	1.25	0.0E+00	Y08232.1	NT	H.sapiens ferritin alpha pseudogene
4926	17943	30835	1.17	0.0E+00	AB014533.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
4927	17944	30836	2.3	0.0E+00	6877648	NT	Mus musculus zinc finger protein interacting with K protein 1 (ZK1), mRNA
4929	17946	30838	1.49	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DP11) (DSP) mRNA
4930	17947	30839	0.97	0.0E+00	Y16723.1	NT	Homo sapiens gene encoding filenstin, exon 8
4931	17948	30840	1.15	0.0E+00	7705548	NT	Homo sapiens zinc-finger DNA-binding protein (HJMHOXY1), mRNA
4932	17949		25.08	0.0E+00	AJ010442.1	NT	Homo sapiens mRNA for Immunoglobulin kappa light chain, anti-RhD, therad 7
4936	17952	30844	25.15	0.0E+00	AF050068.1	NT	Homo sapiens MHC class 1 region
4938	17954		1.97	0.0E+00	4505508	NT	Homo sapiens oploid receptor, delta 1 (OPRD1) mRNA
4939	17955	30847	2.01	0.0E+00	AF091711.1	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
4941	17957		0.91	0.0E+00	U39866.1	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3) gene, exon 7
4952	17967	30857	0.99	0.0E+00	D63662.1	NT	Homo sapiens COL4A6 gene for $\alpha 2(V)$ collagen, exon 44 and partial cds
4954	17969	30859	1.62	0.0E+00	4503684	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FPPS) mRNA
4961	17978		0.98	0.0E+00	AI291128.1	EST_HUMAN	gnt15105.x1 NC1_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881921 3' similar to TR:Q61632 Q61632
4972	17987	30878	0.93	0.0E+00	4504082	NT	EN-2/LACZ FUSION PROTEIN ;
4972	17987	30879	0.93	0.0E+00	4504082	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
4990	18005	30893	1.88	0.0E+00	AL163284.2	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
4995	18010	30897	1.24	0.0E+00	7862319	NT	Homo sapiens chromosome 21 segment HS21C0384
5008	18022		6.04	0.0E+00	U14967.1	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
5018	18032	30918	1.06	0.0E+00	M10976.1	NT	Homo ribosomal protein L21 mRNA, complete cds
5020	18034		2.78	0.0E+00	BE408963.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
5023	18037	30922	3.2	0.0E+00	4758199	NT	601303729F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638119 5'
							Homo sapiens desmoplakin (DPI, DP11) (DSP) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5030	18044	30928	1.24	0.0E+00	AB028968.1	NT	Homo sapiens mRNA for KIAA1043 protein, partial cds
5044	18057	30935	1.97	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5044	18057	30936	1.97	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5057	18068	30947	0.75	0.0E+00	AA601246.1	EST_HUMAN	no14g09.at NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR-E239140 E239140 SPALT PROTEIN;
5057	18068	30948	0.76	0.0E+00	AA601246.1	EST_HUMAN	no14g09.at NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR-E239140 E239140 SPALT PROTEIN;
5057	18068	30949	0.75	0.0E+00	AA601246.1	EST_HUMAN	no14g09.at NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR-E239140 E239140 SPALT PROTEIN;
5074	18084		1.34	0.0E+00	4758225	NT	Homo sapiens E2F transcription factor 2 (E2F2) mRNA
5088	18098	30974	0.8	0.0E+00	U53588.1	NT	Homo sapiens MHC class 1 region
5094	18104		1.27	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
5097	18107		24.84	0.0E+00	D60657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
5122	18132	31009	3.46	0.0E+00	X62988.1	NT	Bacillus amyloqueliciens sacB gene for levansucrase (EC 2.4.1.10)
5141	18150	31029	0.98	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5141	18150	31030	0.98	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5142	18151	31031	0.86	0.0E+00	6454163	NT	Homo sapiens cyclophilin (USA-CYP) mRNA
5171	18180	31057	1.07	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5171	18180	31058	1.07	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5178	18185	31062	1.31	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5208	18217	31082	0.84	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51697), mRNA
5208	18217	31083	0.84	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51697), mRNA
5218	18227	31101	1.13	0.0E+00	U28565.1	NT	Human versican V2 core protein precursor splice-variant mRNA, complete cds
5221	18229	31103	1.01	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
5221	18229	31104	1.01	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
5238	18244	31116	1.11	0.0E+00	4826777	NT	Homo sapiens jumonji (mouse) homolog (JMJ) mRNA
5257	18265		1.35	0.0E+00	U53367.1	NT	Human oligodendrocyte myelin glycoprotein (OMG) exons 1-2; neurofibromatosis 1 (NF1) exons 28-49; ectopic viral integration site 2B (EVI2B) exons 1-2; ectopic viral integration site 2A (EVI2A) exons 1-2; adenyate kinase (AK3) exons 1-2
5264	18272		1.06	0.0E+00	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
5296	18301	31161	0.63	0.0E+00	AB036358.1	NT	Homo sapiens mRNA for neuraminidase protein, complete cds
5305	18308		2.09	0.0E+00	ALD40249.1	EST_HUMAN	DKFZp4340713.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp4340713 5'
5313	18329		3.2	0.0E+00	AF093093.1	NT	Homo sapiens acornitase (ACO2) gene, nuclear gene encoding mitochondrial protein, exon 15
5324	18430	31181	2.03	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5324	18430	31182	2.03	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5346	18451	31322	1.19	0.0E+00	A1834854.1	EST_HUMAN	wp08g08.x1 NC1_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2484084 3'
5349	18454	31325	1.2	0.0E+00	9256579	NT	Homo sapiens protocadherin alpha 13 (PCDH13), mRNA
5364	18469	31340	4.04	0.0E+00	BE631080.1	EST_HUMAN	RC3-GN0076-310800-013-b03 GN0076 Homo sapiens cDNA
5368	18473	31344	2.63	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5368	18473	31345	2.63	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5376	18480	31354	32.34	0.0E+00	X66163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5376	18480	31355	32.34	0.0E+00	X66163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5457	18559	31470	6.37	0.0E+00	BE675498.1	EST_HUMAN	7110c06.x1 NC1_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:3294250 3'
5458	18560	31471	1.72	0.0E+00	BE220753.1	EST_HUMAN	H09a02.x1 NC1_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3165194 3' similar to SW:Y054_HUMAN
5459	18561	31472	1.69	0.0E+00	BE784412.1	EST_HUMAN	P42894 HYPOTHETICAL PROTEIN KIA0054. ;
5459	18561	31473	1.69	0.0E+00	BE784412.1	EST_HUMAN	601598422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
							601598422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
5460	18562	31474	0.63	0.0E+00	A1189142.1	EST_HUMAN	q04a04.x1 Soares_placenta_8to9weeks_2NbfHP6c6w Homo sapiens cDNA clone IMAGE:1722702 3' similar to SW:T2D3_DROME P46946 TRANSCRIPTION INITIATION FACTOR TF1D 85 KD SUBUNIT ;
5464	18566	31477	18.78	0.0E+00	M28908.1	NT	Homo sapiens eosinophil peroxidase (EPP) gene, exon 7
5468	18570	31480	0.56	0.0E+00	A1791363.1	EST_HUMAN	dt68a09.y6 NC1_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1472152 5' similar to gb:M18512 IG
5478	25639	31488	4.26	0.0E+00	11421038	NT	HEAVY CHAIN PRECURSOR V-I REGION (HUMAN);
5486	18588		1.72	0.0E+00	BF665962.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4), mRNA
5489	18589	31489	0.77	0.0E+00	AU134406.1	EST_HUMAN	602118828F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4276254 5'
5489	18589	31500	0.77	0.0E+00	AU134406.1	EST_HUMAN	AU134406 OVARI1 Homo sapiens cDNA clone OVARC1001894 5'
5495	18595	31507	0.64	0.0E+00	BE538857.1	EST_HUMAN	AU134406 OVARI1 Homo sapiens cDNA clone OVARC1001894 5'
5504	18604	31533	1.22	0.0E+00	BE282784.1	EST_HUMAN	601081489F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447839 5'
5509	18609	31539	2.06	0.0E+00	BF626328.1	EST_HUMAN	601105891F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:2898310 5'
5509	18609	31540	2.05	0.0E+00	BF626328.1	EST_HUMAN	602071372F1 NC1_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5529	20048	33350	2.31	0.0E+00	4557364	NT	602071372F1 NC1_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5532	18630	31567	1.03	0.0E+00	AB007935.1	NT	Homo sapiens Bloom syndrome (BLM) mRNA
5532	18630	31568	1.03	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0468 protein, partial cds
5536	18633	31572	4.25	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5536	18633	31573	4.25	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5550	18647	31589	1.18	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5550	18647	31590	1.18	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5668	18683	31623	1.8	0.0E+00	11420819	NT	Homo sapiens diffractory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5672	18688	31628	1.55	0.0E+00	Z38133.1	NT	H. sapiens mRNA for myosin
5681	18687	31655	0.87	0.0E+00	D61554.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-418D05
5691	18687	31656	0.87	0.0E+00	D61554.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-418D05
5694	18690	31660	3.21	0.0E+00	BF528931.1	EST_HUMAN	602042322F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4178988 5'
5694	18690	31661	3.21	0.0E+00	BF528931.1	EST_HUMAN	602042322F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4178988 5'
5699	18695	31665	2.24	0.0E+00	BF313139.1	EST_HUMAN	601897653F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128815 5'
5610	18706	31863	3.86	0.0E+00	11434392	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5628	18722	31881	0.57	0.0E+00	A1928181.1	EST_HUMAN	wc85b02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463051 3' similar to TR-O75064
5628	18722	31882	0.57	0.0E+00	A1928181.1	EST_HUMAN	wc85b02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463051 3' similar to TR-O75064
5644	18740	31905	1.24	0.0E+00	BE260777.1	EST_HUMAN	075054 KIAA0486 PROTEIN ;
5653	18749	31932	7.42	0.0E+00	AW587318.1	EST_HUMAN	601150252F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502309 5'
5668	18763	31933	2.41	0.0E+00	BE292889.1	EST_HUMAN	MRO-SN0037-030400-001-107 SN0037 Homo sapiens cDNA
5689	18784	31955	1.79	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887903 5'
5689	18784	31956	1.79	0.0E+00	11420819	NT	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887903 5'
5697	18792	31964	4.3	0.0E+00	AF084254.1	NT	Homo sapiens diffractory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5697	18792	31965	4.3	0.0E+00	AF084254.1	NT	Homo sapiens diffractory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5704	18799	31976	2.98	0.0E+00	AJ224639.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5704	18799	31976	2.98	0.0E+00	AJ224639.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5704	18799	31976	2.98	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5735	18829	32007	0.7	0.0E+00	AH198515.1	EST_HUMAN	Homo sapiens Surf-5 and Surf-6 genes
5739	18833	32013	7.46	0.0E+00	M85718.1	EST_HUMAN	qf94g10.x1 Soares_placenta_86c9weeks_2Nbl-IP8ic8W Homo sapiens cDNA clone IMAGE:1767730 3'
5746	18840	32022	5.85	0.0E+00	AW405472.1	EST_HUMAN	similar to SW:CADYC_HUMAN P55289 BRAIN-CADHERIN PRECURSOR ;
5759	18852	32032	1.19	0.0E+00	Z26269.1	NT	EST02238 Fetal brain, Strabegene (cat#938206) Homo sapiens cDNA clone HIFBQM48
5771	18863	32042	1.87	0.0E+00	AW361877.1	EST_HUMAN	UI-HF-BLO-adj-d-02-Q-UJLT NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3091658 5'
5771	18863	32043	1.87	0.0E+00	AW361877.1	EST_HUMAN	H. sapiens isoform 1 gene for L-type calcium channel, exon 14 cdh15
5771	18863	32044	1.87	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-105 CT0263 Homo sapiens cDNA
5774	18866	32047	0.64	0.0E+00	AB035266.1	NT	PM3-CT0263-091289-007-105 CT0263 Homo sapiens cDNA
5774	18866	32048	0.64	0.0E+00	AB035266.1	NT	PM3-CT0263-091289-007-105 CT0263 Homo sapiens cDNA
5774	18866	32048	0.64	0.0E+00	AB035266.1	NT	Homo sapiens mRNA for neurexin II, complete cds
5774	18866	32048	0.64	0.0E+00	AB035266.1	NT	Homo sapiens mRNA for neurexin II, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5776	18688	32051	2.24	0.0E+00	U36281.1	NT	Human beta-prime-actin (BAM22) gene, exon 13
5811	18901	32084	1.13	0.0E+00	AB046861.1	NT	Homo sapiens mRNA for KIAA1641 protein, partial cds
5833	18923	32107	0.53	0.0E+00	AI114826.1	EST_HUMAN	HA1435 Human fetal liver cDNA library/Homo sapiens cDNA
5873	18982	32151	2.4	0.0E+00	AA185805.1	EST_HUMAN	z65b11.1 Stratagene muscle 837209 Homo sapiens cDNA clone IMAGE:627833 5' similar to gb:U03740
5874	18983	32162	1.22	0.0E+00	AJ006345.1	NT	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
5874	18983	32163	1.22	0.0E+00	AJ006345.1	NT	Homo sapiens KVLQT1 gene
5883	18972	32165	1.32	0.0E+00	AI207616.1	EST_HUMAN	Homo sapiens KVLQT1 gene
5905	18991	32182	5.12	0.0E+00	11416801	NT	HA2881 Human fetal liver cDNA library/Homo sapiens cDNA
5910	18998	32185	1.25	0.0E+00	BE791173.1	EST_HUMAN	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5920	19008	32188	1.09	0.0E+00	9988943	NT	601684032F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3838551 5'
5921	19007	32189	7.69	0.0E+00	BE560082.1	EST_HUMAN	Homo sapiens arylidate-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5922	19008	32200	1.33	0.0E+00	10048478	NT	601345141F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3877843 5'
							Mus musculus ezonin (Ac2), mRNA
5923	19009	32201	3.08	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5923	19009	32202	3.06	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5942	19028	32222	1.81	0.0E+00	BF338835.1	EST_HUMAN	602036272F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4184321 5'
5946	19032	32225	0.97	0.0E+00	AF142821.1	NT	Homo sapiens calcium channel gamma 5 subunit (CACNG5) gene, exon 4 and complete cds
5947	19033	32226	2.82	0.0E+00	BE273883.1	EST_HUMAN	601104482F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3347463 5'
5959	19044	32243	1.14	0.0E+00	BE603096.1	EST_HUMAN	h283d11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214581 3' similar to TR:Q82084 Q82084
5963	19048	32249	1.79	0.0E+00	BF569805.1	EST_HUMAN	PHOSPHOLIPASE C NEIGHBORING :
5968	19053	32253	1.11	0.0E+00	AA454642.1	EST_HUMAN	60218882F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4910078 5'
6004	19087	32287	2.27	0.0E+00	AF217289.1	NT	z689d08.x1 Soares_NihHMPu_S1 Homo sapiens cDNA clone IMAGE:811883 3'
6006	19089	32289	2.43	0.0E+00	BE828144.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6011	19094	32294	0.91	0.0E+00	BE968636.1	EST_HUMAN	RC6-ET0027-210600-022-G10 ET0027 Homo sapiens cDNA
6017	19100	32302	0.53	0.0E+00	AJ288980.1	NT	601045287F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3830453 5'
							Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
6030	19113	32315	0.61	0.0E+00	BE673888.1	EST_HUMAN	7472e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278540 3' similar to SW:DAX1_HUMAN
6030	19113	32316	0.61	0.0E+00	BE673888.1	EST_HUMAN	P51843 ORPHAN NUCLEAR RECEPTOR DAX-1. [1];
							7472e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278540 3' similar to SW:DAX1_HUMAN
6035	19118	32322	0.8	0.0E+00	AW276760.1	EST_HUMAN	P51843 ORPHAN NUCLEAR RECEPTOR DAX-1. [1];
							xp65f03.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2748246 3' similar to TR:P78336 P78336
							GUANYLATE KINASE ASSOCIATED PROTEIN. ;

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6047	19128	32336	0.67	0.0E+00	BF031742.1	EST_HUMAN	601558060F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3827775 5'
6047	19128	32337	0.67	0.0E+00	BF031742.1	EST_HUMAN	601558060F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3827775 5'
6059	19140	32352	1.27	0.0E+00	AW470848.1	EST_HUMAN	ha34408.x1 NCL_CGAP_K412 Homo sapiens cDNA clone IMAGE:2876595 3' similar to TR-Q8Z1N3
6072	19153	32364	0.95	0.0E+00	BF155570.1	EST_HUMAN	Q8Z1N3 MYOSIN-RHOGAP PROTEIN, MYR 7.;
6072	19153	32365	0.95	0.0E+00	BF155570.1	EST_HUMAN	QV4-HT0894-290900-389-a10 HT0894 Homo sapiens cDNA
6080	19160	32371	1.38	0.0E+00	W33069.1	EST_HUMAN	QV4-HT0894-290900-389-a10 HT0894 Homo sapiens cDNA
6080	19160	32372	1.38	0.0E+00	W33069.1	EST_HUMAN	zcd08h08.1 Soares_parathyroid_tumor_Nb-IPA Homo sapiens cDNA clone IMAGE:321755 5'
6081	19181	32376	2.28	0.0E+00	AF012618.1	NT	zcd08h08.1 Soares_parathyroid_tumor_Nb-IPA Homo sapiens cDNA clone IMAGE:321755 5'
6084	19184	32378	2.82	0.0E+00	BE280197.1	EST_HUMAN	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14
6091	19170	32385	2.31	0.0E+00	BE889610.1	EST_HUMAN	601158516F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3505323 5'
6093	19172	32388	0.53	0.0E+00	BE398873.1	EST_HUMAN	601512630F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3914238 5'
6109	19188	32408	0.63	0.0E+00	AW752848.1	EST_HUMAN	6012863320F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3613085 5'
6112	19190	32410	1.46	0.0E+00	11433071	NT	IL3-CT0220-11169-028-E04 CT0220 Homo sapiens cDNA
6112	19190	32411	1.46	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product: synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6113	19191	32412	1.12	0.0E+00	BE901608.1	EST_HUMAN	Homo sapiens KIAA0735 gene product: synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6113	19191	32413	1.12	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3960200 5'
6113	19191	32414	1.12	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3960200 5'
6129	25654	32431	9.98	0.0E+00	9789988	NT	601677735F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3960200 5'
6132	19209	32434	1.43	0.0E+00	AA169508.1	EST_HUMAN	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
6132	19209	32435	1.43	0.0E+00	AA169508.1	EST_HUMAN	zr40h01.1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to
6155	19230	32460	11.54	0.0E+00	U34626.1	NT	SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5.;
6155	19230	32461	11.54	0.0E+00	U34626.1	NT	zr40h01.1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to
6157	19232	32463	0.54	0.0E+00	AW653983.1	EST_HUMAN	SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5.;
6157	19232	32464	0.54	0.0E+00	AW653983.1	EST_HUMAN	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6197	19271	32506	1.14	0.0E+00	BE268330.1	EST_HUMAN	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6207	19281	32514	1.24	0.0E+00	BE155571.1	EST_HUMAN	RC3-CT0254-110300-027-409 CT0254 Homo sapiens cDNA
6217	19291	32524	0.63	0.0E+00	M38107.1	NT	RC3-CT0254-110300-027-409 CT0254 Homo sapiens cDNA
6254	19327	32558	1.71	0.0E+00	BE379007.1	EST_HUMAN	601114823F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3355555 5'
6260	19333	32564	1.19	0.0E+00	AU137772.1	EST_HUMAN	QV0-HT0368-090200-089-a09 HT0368 Homo sapiens cDNA
6262	19354	32590	3.68	0.0E+00	U45982.1	NT	Human neurofibromatosis type 1 (NF-1) mRNA, 3' end of cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6311	19382	32822	4.53	0.0E+00	AA204740.1	EST_HUMAN	zq81d03.r1 Stratagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:648005 5' similar to TR:G854195 G854195 LEUKOCYTE SURFACE PROTEIN. ;
6312	19383	32823	4.05	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6312	19383	32824	4.05	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6331	19401	32842	0.58	0.0E+00	U07223.1	NT	Human beta2-oligomerin mRNA, complete cds
6349	19418	32859	8.33	0.0E+00	11428387	NT	Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8), mRNA
6363	19422	32864	3.68	0.0E+00	BE267173.1	EST_HUMAN	601109532F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350622 5'
6369	19437		0.97	0.0E+00	AI68048.1	EST_HUMAN	#91f10.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2248839 3' similar to TR:Q14839 Q14839 M4-2 PROTEIN. ;
6373	19441	32883	1.28	0.0E+00	L35030.1	NT	Human anion exchanger (AE1) gene, exons 1-20
6382	19450	32891	1.29	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6382	19450	32892	1.29	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6393	19461	32707	0.65	0.0E+00	AI198025.1	EST_HUMAN	q50b11.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1859801 3' similar to TR:Q12838 Q12838 TFIIC ALPHA SUBUNIT ;
6393	19461	32708	0.65	0.0E+00	AI198025.1	EST_HUMAN	q50b11.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1859801 3' similar to TR:Q12838 Q12838 TFIIC ALPHA SUBUNIT ;
6396	19464	32710	1	0.0E+00	BF367123.1	EST_HUMAN	MFO-HT0823-220800-102-505 HT0823 Homo sapiens cDNA
6404	19472	32720	1.77	0.0E+00	11435630	NT	Homo sapiens peptide transporter 3 (LOC51290), mRNA
6414	19482	32729	0.79	0.0E+00	D55648.1	NT	Human mRNA for alpha mannosidase II isozyme, complete cds
6432	19498	32761	1	0.0E+00	AW178142.1	EST_HUMAN	IL3-HT0062-010988-014-A04 HT0062 Homo sapiens cDNA
6453	19518	32768	0.74	0.0E+00	BE674544.1	EST_HUMAN	7c02c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3281302 3' similar to SW:Y176_HUMAN Q14681 HYPOTHETICAL PROTEIN KIAA0176 ;
6458	19523	32774	0.88	0.0E+00	7882039	NT	Homo sapiens KIAA0285 gene product (KIAA0285), mRNA
6472	19537		8.48	0.0E+00	AV650020.1	EST_HUMAN	AV650020 GLC Homo sapiens cDNA clone GLCCAD09 3'
6481	19546	32785	3.68	0.0E+00	AW575598.1	EST_HUMAN	UH-HF-BLG-eco-g-12-Q-U1.s1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058761 3'
6484	19549	32788	5.02	0.0E+00	H01255.1	EST_HUMAN	Y27603.r1 Soares placenta Nb2IP Homo sapiens cDNA clone IMAGE:149833 5'
6493	19558	32809	1.18	0.0E+00	11428283	NT	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
6498	19562	32814	8.09	0.0E+00	X15377.1	NT	Human gene for the light and heavy chains of myeloperoxidase
6500	19564	32816	0.72	0.0E+00	AA456375.1	EST_HUMAN	aa14607.r1 Soares NIH-MPUs ST1 Homo sapiens cDNA clone IMAGE:813252 5'
6501	19565	32817	1.23	0.0E+00	AI012841.1	EST_HUMAN	tz57f08.x1 NCI_CGAP_Ov36 Homo sapiens cDNA clone IMAGE:2292887 3' similar to SW:NTCS_HUMAN
6507	19571	32823	3.93	0.0E+00	BE735989.1	EST_HUMAN	P53796 SODIUM- AND CHLORIDE-DEPENDENT CREATINE TRANSPORTER 2 ;
6507	19571	32824	3.93	0.0E+00	BE735989.1	EST_HUMAN	601305388F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3633616 5'
6511	19575	32830	0.78	0.0E+00	AW748596.1	EST_HUMAN	601305388F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3633616 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6511	19575	32831	0.78	0.0E+00	AW748596.1	EST_HUMAN	MF0-BT0284-221189-002-f11 BT0284 Homo sapiens cDNA
6512	19576		0.67	0.0E+00	U77628.1	NT	Homo sapiens Achaete-Scute homologue 2 (ASCL2) gene, complete cds
6514	19578	32833	28.27	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6514	19578	32834	28.27	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6519	19582	32840	0.86	0.0E+00	BE780453.1	EST_HUMAN	601488712F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3871869 5'
6520	19583	32841	1.02	0.0E+00	X62217.1	NT	H. sapiens germ-line immunoglobulin heavy chain, variable region, (13-2)
6537	19599	32862	1.84	0.0E+00	AI889483.1	EST_HUMAN	w25607.x1 NC1_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2498220 3'
6551	19612	32873	1.76	0.0E+00	BE283153.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887863 5'
6551	19612	32874	1.76	0.0E+00	BE283153.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887863 5'
6584	19644	32912	0.71	0.0E+00	BE867657.1	EST_HUMAN	601443175F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847291 5'
6528	19684	32982	1.2	0.0E+00	AW406348.1	EST_HUMAN	UHF-BLD-eco-h-02-0-JL1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058931 5'
6528	19684	32983	1.2	0.0E+00	AW406348.1	EST_HUMAN	UHF-BLD-eco-h-02-0-JL1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058931 5'
6560	19717	32984	0.89	0.0E+00	AV719444.1	EST_HUMAN	AV719444 GLC Homo sapiens cDNA clone GLCEHC08 5'
6569	19726	33001	1.27	0.0E+00	BE898340.1	EST_HUMAN	601081150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6569	19726	33002	1.27	0.0E+00	BE898340.1	EST_HUMAN	601081150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
							Homo sapiens low voltage-activated T-type calcium channel alpha 1G splice variant Cav1.1a (CACNA1G) mRNA, complete cds
6572	19729	33005	2.18	0.0E+00	AF190880.1	NT	Homo sapiens tuberin (TSC2) gene, exons 38, 39, 40 and 41
6575	19732	33008	0.84	0.0E+00	L48548.1	NT	Homo sapiens transformation/transcription domain-associated protein (TRRAP), mRNA
6577	19734	33009	1.11	0.0E+00	11420668	NT	au88108.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206;
6584	19741	33016	3.24	0.0E+00	AW163840.1	EST_HUMAN	TR:O15390 O15390 GT24. [3] TR:O43840 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6584	19741	33017	3.24	0.0E+00	AW163840.1	EST_HUMAN	TR:O15390 O15390 GT24. [3] TR:O43840 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6588	19745	33020	0.85	0.0E+00	W37163.1	EST_HUMAN	SW-ZN45 HUMAN Q02386 ZINC FINGER PROTEIN 45;
6588	19745	33021	0.85	0.0E+00	W37163.1	EST_HUMAN	zb20008.l1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:302826 5' similar to
6706	19782	33041	1.19	0.0E+00	BE794853.1	EST_HUMAN	SW-ZN45 HUMAN Q02386 ZINC FINGER PROTEIN 45;
6713	19789	33048	4.81	0.0E+00	BE788873.1	EST_HUMAN	601589371F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943504 5'
6714	19770	33049	3.07	0.0E+00	BE787855.1	EST_HUMAN	601587561F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941847 5'
6714	19770	33050	3.07	0.0E+00	BE787855.1	EST_HUMAN	QV1-GN0065-140800-318-h02 GN0065 Homo sapiens cDNA
6718	19774	33053	7.15	0.0E+00	BE888813.1	EST_HUMAN	QV1-GN0065-140800-318-h02 GN0065 Homo sapiens cDNA
6718	19774	33054	7.15	0.0E+00	BE888813.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6727	19783	33082	5.42	0.0E+00	L24493.1	NT	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
							Human antigen CD27 gene, exons 1-2

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6732	19788	33068	2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6732	19788	33067	2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6738	19794	33074	3.67	0.0E+00	6005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
6741	19796	33076	3.87	0.0E+00	A1639412.1	EST_HUMAN	U21111.1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW:WNT3_MOUSE
6743	19798	33078	1.41	0.0E+00	L32832.1	NT	P17553 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR ;
6755	19809	33080	0.78	0.0E+00	AW605430.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
6757	19811	33081	3.98	0.0E+00	AA434584.1	EST_HUMAN	UHF-BND-ema-c-01-0-UI-1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081217 5'
6771	19828	33173	1.13	0.0E+00	BF217200.1	EST_HUMAN	zW52c03.1 Soares_tetad_fetus_Nb21HF8_9w Homo sapiens cDNA clone IMAGE:773688 5'
6775	19830	33113	1.68	0.0E+00	BE826876.1	EST_HUMAN	601885317F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:4103693 5'
6808	19862	33149	0.75	0.0E+00	11428758	NT	QV3-BN0047-300800-278-c08 BN0047 Homo sapiens cDNA
6808	19862	33150	0.75	0.0E+00	11428758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6826	19880	33171	2.04	0.0E+00	AU125828.1	EST_HUMAN	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6826	19882	33173	0.84	0.0E+00	BE701434.1	EST_HUMAN	AU125828 NT2RNA4 Homo sapiens cDNA clone NT2RNA4002430 5'
6826	19882	33174	0.84	0.0E+00	BE701434.1	EST_HUMAN	PM2-NIN0174-280700-001-H10 NN0174 Homo sapiens cDNA
6851	19904	33189	1.46	0.0E+00	BE142363.1	EST_HUMAN	PM2-NIN0174-280700-001-H10 NN0174 Homo sapiens cDNA
6873	19928	33222	1.01	0.0E+00	BE006012.1	EST_HUMAN	CM0-HT0143-270889-082-d08 HT0143 Homo sapiens cDNA
6873	19928	33223	1.01	0.0E+00	BE006012.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6901	19953	33250	7.7	0.0E+00	BE168131.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6903	19955	33252	3.49	0.0E+00	BF085687.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
6943	20167	33490	3.27	0.0E+00	AA190755.1	EST_HUMAN	IL5-GN0032-180800-145-d07 GN0032 Homo sapiens cDNA
6954	20179	33504	1.04	0.0E+00	U39573.1	NT	zP88c03.1 StrataGene Hela cell s3 937216 Homo sapiens cDNA clone IMAGE:827202 5'
6958	20183	33506	0.7	0.0E+00	BE671987.1	EST_HUMAN	Human salivary peroxidase mRNA, complete cds
6970	20193	33520	6.96	0.0E+00	A1940621.1	EST_HUMAN	7a48407 x1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:3222037 3' similar to TR:Q8Z285 Q8Z285
6970	20193	33521	6.96	0.0E+00	A1940621.1	EST_HUMAN	TEKTIN. ;
6984	20207	33537	1.98	0.0E+00	11435828	NT	IL3-ST0024-230758-001-B01 ST0024 Homo sapiens cDNA
6988	20124	33439	1.01	0.0E+00	AL042443.1	EST_HUMAN	IL3-ST0024-230758-001-B01 ST0024 Homo sapiens cDNA
6999	20125	33440	47.69	0.0E+00	X56183.1	NT	Homo sapiens CD8 antigen (CD8), mRNA
7002	20128	33443	0.84	0.0E+00	A1168270.1	EST_HUMAN	DKFZp434D2021_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D2021 5'
7007	20133	33448	0.92	0.0E+00	BE734087.1	EST_HUMAN	H.sapiens immunoglobulin heavy chain gene, variable region
							co010401.x1 Soares_NSF_F8_9w_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1565761 3' similar to
							TR:Q28623 Q28623 TEKTIN C1. ;
							601567370F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842080 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7030	18362	31249	1.17	0.0E+00	BE568391.1	EST_HUMAN	601339977F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682287 5'
7040	18372	31259	12.91	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847697 5'
7040	18372	31260	12.91	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847697 5'
7048	20070	33376	1.94	0.0E+00	BE550182.1	EST_HUMAN	7b49f03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231681 3' similar to SW:GG95_HUMAN Q08378 GOLGIN-96.;
7048	20070	33377	1.94	0.0E+00	BE550182.1	EST_HUMAN	7b49f03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
7074	20068	33406	2.29	0.0E+00	BF088376.1	EST_HUMAN	Q08379 GOLGIN-95.;
7081	20102	33413	1.41	0.0E+00	AA195103.1	EST_HUMAN	CM1-HT0877-060900-397-g11 HT0877 Homo sapiens cDNA zr34g03.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:665332 5'
7088	20022		11.47	0.0E+00	11034810	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
7090	20024	33326	0.91	0.0E+00	11431474	NT	Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA
7092	20026	33326	0.76	0.0E+00	BE313075.1	EST_HUMAN	601150662F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
7092	20026	33330	0.76	0.0E+00	BE313076.1	EST_HUMAN	601150662F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
7108	20040	33342	3.08	0.0E+00	BF568905.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
7114	20048	33350	0.81	0.0E+00	4557364	NT	Homo sapiens Bloom syndrome (BLM) mRNA
7122	20056		2.02	0.0E+00	J03069.1	NT	Human MYCL2 gene, complete cds
7132	20108	33419	3.33	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7132	20108	33420	3.33	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7133	20109	33421	1.77	0.0E+00	M38113.1	NT	Human neurofibromatosis type 1 gene, exon x6
7146	18378	31268	3.02	0.0E+00	11420775	NT	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
7147	18379	31267	0.57	0.0E+00	AI419989.1	EST_HUMAN	tg33c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112480 3' similar to SW:OXYB_HUMAN_P22059 OXYSTEROL-BINDING PROTEIN.;
7147	18379	31268	0.57	0.0E+00	AI419989.1	EST_HUMAN	tg33c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112480 3' similar to SW:OXYB_HUMAN_P22059 OXYSTEROL-BINDING PROTEIN.;
7152	18384	31272	0.88	0.0E+00	BE256708.1	EST_HUMAN	601115515F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3356330 5'
7173	18404	31202	1.21	0.0E+00	AU118478.1	EST_HUMAN	AU118478 HEMBA1 Homo sapiens cDNA clone HEMBA1003679 5'
7176	18407	31208	5.02	0.0E+00	BE262841.1	EST_HUMAN	601148954F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501829 5'
7177	18408	31207	2.25	0.0E+00	Z37978.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7177	18408	31208	2.25	0.0E+00	Z37978.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7178	18409	31209	3.32	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7178	18409	31210	3.32	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7185	18416	31217	1.33	0.0E+00	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
7187	18418	31219	0.59	0.0E+00	BF130816.1	EST_HUMAN	601819722F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4051709 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7192	20216	33548	0.67	0.0E+00	BE762770.1	EST_HUMAN	QV3-NT0022-140800-223-401 NT0022 Homo sapiens cDNA
7198	20222	33553	2.39	0.0E+00	BF589805.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
7200	20224	33555	0.68	0.0E+00	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7200	20224	33556	0.68	0.0E+00	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7204	20228	33561	4.32	0.0E+00	L01978.1	NT	Human type IV sodium channel alpha polypeptide (SCN4A) gene, exon 19
7209	20232	33565	1.49	0.0E+00	AW502362.1	EST_HUMAN	U1HF-BR0p-aka-4-10-Q-U1.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076280 5'
7209	20232	33566	1.49	0.0E+00	AW502362.1	EST_HUMAN	U1HF-BR0p-aka-4-10-Q-U1.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076280 5'
7218	20240	33574	0.93	0.0E+00	AL038681.1	EST_HUMAN	DKFZp434D2211_J1 434 (synonym: Hhes3) Homo sapiens cDNA clone DKFZp434D2211 5'
7218	20240	33575	0.93	0.0E+00	AL038681.1	EST_HUMAN	DKFZp434D2211_J1 434 (synonym: Hhes3) Homo sapiens cDNA clone DKFZp434D2211 5'
7227	20249	33583	6.16	0.0E+00	BF306998.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7233	20254	33588	2.16	0.0E+00	U41302.1	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
7276	20010	33312	1.21	0.0E+00	AL046784.1	NT	Novel human gene mapping to chromosome 13
7315	20286	33627	0.69	0.0E+00	AB026893.1	NT	Homo sapiens mRNA for vesicular cadherin-2, complete cds
7316	20286	33628	0.69	0.0E+00	AB026893.1	NT	Homo sapiens mRNA for vesicular cadherin-2, complete cds
7320	20291	33634	0.68	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7320	20291	33635	0.68	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7326	20297	33641	1.23	0.0E+00	AW654806.1	EST_HUMAN	EST1968878 MAGC resequences, MAGC Homo sapiens cDNA
7327	20298	33642	1.14	0.0E+00	BE254103.1	EST_HUMAN	601113958F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354588 5'
7340	20311	33654	1.23	0.0E+00	L01973.1	NT	Human type VI sodium channel alpha polypeptide (SCN4A) gene, exon 14
7348	20318	33664	0.68	0.0E+00	AB007835.1	NT	Homo sapiens mRNA for KIAA0468 protein, partial cds
7348	20318	33665	0.68	0.0E+00	AB007835.1	NT	Homo sapiens mRNA for KIAA0468 protein, partial cds
7354	20324	33672	1.38	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001558 5'
7370	20340	33682	1	0.0E+00	11428081	NT	Homo sapiens membrane protein GH1 (CH1), mRNA
7376	20345	33687	2.24	0.0E+00	AU143706.1	EST_HUMAN	AU143706 Y79AA1 Homo sapiens cDNA clone Y79AA1002365 5'
7376	20346	33687	0.96	0.0E+00	4758839	NT	Homo sapiens nectin 1 (NTN1), mRNA
7385	20355	33706	1.34	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917184 5'
7385	20355	33707	1.34	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917184 5'
7407	18430	31181	2.28	0.0E+00	AF137288.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7407	18430	31182	2.28	0.0E+00	AF137288.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7419	20366	33738	0.7	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7419	20366	33737	0.7	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7432	20369	33751	4.41	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7432	20369	33752	4.41	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7447	20413	33766	0.65	0.0E+00	AF227744.1	NT	Homo sapiens voltage-dependent calcium channel alpha 1G subunit isoform aa (CAGNA1G) mRNA, complete cds
7469	20435	33791	36.24	0.0E+00	AI128344.1	EST_HUMAN	qc87a07.x1 Soares_placenta_8to9weeks_2Nbl-IP8c5W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW-ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR repetitive element ;
7469	20435						qc87a07.x1 Soares_placenta_8to9weeks_2Nbl-IP8c5W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW-ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR repetitive element ;
7472	20438	33792	36.24	0.0E+00	AI128344.1	EST_HUMAN	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7472	20438	33795	0.82	0.0E+00	AF227135.1	NT	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7472	20438	33796	0.82	0.0E+00	AF227135.1	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7475	20441	33768	5.42	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7475	20441	33800	5.42	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7478	20444		13.74	0.0E+00	BF337375.1	EST_HUMAN	602035080F1 NC1_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4182839 5'
7480	20446	33802	2.76	0.0E+00	AA128453.1	EST_HUMAN	zn60f08.f1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:562801 5' similar to TR:G806562 G806562 NEBULIN ;
7485	20450	33808	0.75	0.0E+00	AL070497.1	EST_HUMAN	DKFZp434B0226 .1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0226 5'
7485	20450	33809	0.75	0.0E+00	AL070497.1	EST_HUMAN	DKFZp434B0226 .1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0226 5'
7496	20461	33821	0.57	0.0E+00	AJ270896.1	NT	Homo sapiens partial mRNA for LTRPC5 protein (LTRPC5 gene)
7530	20493	33855	1.12	0.0E+00	BE295499.1	EST_HUMAN	601174576F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528794 5'
7532	20495	33856	0.9	0.0E+00	11427965	NT	Homo sapiens hypothetical protein (FLJ20281), mRNA
7535	20498		1.46	0.0E+00	AI118807.1	EST_HUMAN	ALU18607 HEMBA1 Homo sapiens cDNA clone HEMBA1003969 5'
7536	20499	33859	2.02	0.0E+00	AF005213.1	NT	Homo sapiens arkyrin 1 (ANK1) mRNA, complete cds
7536	20499	33860	2.02	0.0E+00	AF005213.1	NT	Homo sapiens arkyrin 1 (ANK1) mRNA, complete cds
7547	20510	33868	0.85	0.0E+00	AF245505.1	NT	Homo sapiens arkyrin 1 (ANK1) mRNA, complete cds
7555	20518	33873	7.23	0.0E+00	X70172.1	NT	Homo sapiens arkyrin 1 (ANK1) mRNA, complete cds
7557	20520	33875	6.84	0.0E+00	U45448.1	NT	H. sapiens DNA for ZNGP2 pseudogene, exon 4
7557	20520	33876	6.84	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
7570	20533	33891	0.81	0.0E+00	AW656503.1	EST_HUMAN	Human P2x1 receptor mRNA, complete cds
7572	20535	33893	2.85	0.0E+00	AW656503.1	EST_HUMAN	EST368573 MAGC resequences, MAGD Homo sapiens cDNA
7589	20560	33920	0.79	0.0E+00	AF001543.1	EST_HUMAN	EST362586 MAGC resequences, MAGA Homo sapiens cDNA
7589	20560	33921	0.79	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7589	20560	33922	0.79	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7623	20583		0.62	0.0E+00	M80354.1	NT	Human BTf3 protein homologue gene, complete cds
7624	20584	33947	0.72	0.0E+00	BE408293.1	EST_HUMAN	601302679F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3637494 5'

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7635	20595	33958	0.5	0.0E+00	AW402542.1	EST_HUMAN	UI-HF-BK0-eas-g-07-Q-UIJ1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054924 5'
7653	20613		1.3	0.0E+00	R87430.1	EST_HUMAN	ym88h10.1 Soares adult brain N2b4-HB55Y Homo sapiens cDNA clone IMAGE:168051 5'
7654	20614	33978	2.42	0.0E+00	AW289328.1	EST_HUMAN	xd39a05.y1 NCI_CGAP_LU31 Homo sapiens cDNA clone IMAGE:2578840 5' similar to TR-Q08050 Q08050
7676	20634		1.21	0.0E+00	AU117553.1	EST_HUMAN	HNF3FH TRANSCRIPTION FACTOR GENESIS ;
7678	20636	33968	3.92	0.0E+00	11427135	NT	AU117553 HEMBA1 Homo sapiens cDNA clone HEMBA1001681 5'
7697	20655	34019	1.76	0.0E+00	AA211663.1	EST_HUMAN	zif602.1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb-X03740
7703	20660	34024	0.68	0.0E+00	BF229235.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
7710	20667	34034	0.62	0.0E+00	AW986469.1	EST_HUMAN	MRO-AN0083-270900-004-407 AN0083 Homo sapiens cDNA
7713	20670	34037	0.81	0.0E+00	L32832.1	NT	QV3-BN0048-220300-129-e04 BN0048 Homo sapiens cDNA
7740	20694	34058	1.17	0.0E+00	BF306398.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-4) mRNA, complete cds
7740	20694	34059	1.17	0.0E+00	BF306398.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7760	20703	34071	1.24	0.0E+00	AU18767.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7782	20735	34107	0.49	0.0E+00	AW499551.1	EST_HUMAN	AU18767 HEMBA1 Homo sapiens cDNA clone HEMBA1004314 5'
7809	20768	34132	0.64	0.0E+00	AB002355.1	NT	UI-HF-BR0p-ef-e-10-Q-UIJ1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3074778 5'
7810	20759	34133	4.06	0.0E+00	A1752561.1	EST_HUMAN	Human mRNA for KIAA0357 gene, partial cds
7810	20759	34134	4.06	0.0E+00	A1752561.1	EST_HUMAN	cn17405.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17405 random
7879	20823	34200	0.53	0.0E+00	AA399959.1	EST_HUMAN	cn17405.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17405 random
7879	20823	34201	0.53	0.0E+00	AA399959.1	EST_HUMAN	zu68407.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:743125 5'
7880	20824	34202	0.53	0.0E+00	AL046347.2	EST_HUMAN	zu68407.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:743125 5'
7897	20840	34221	1.22	0.0E+00	AF064205.1	NT	DKFZp434J087_j1 434 (synonym: hias3) Homo sapiens cDNA clone DKFZp434J087 5'
7897	20840	34222	1.22	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7905	20848	34233	1.08	0.0E+00	U74315.1	EST_HUMAN	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7919	20862	34250	0.59	0.0E+00	BE439545.1	EST_HUMAN	HSU74315 Human chromosome 14 Homo sapiens cDNA clone 1-4
7920	20863	34251	1.03	0.0E+00	11417342	NT	HTM1-183F1 HTM1 Homo sapiens cDNA
7939	20881	34271	0.5	0.0E+00	BF569905.1	EST_HUMAN	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
7950	20891	34282	0.73	0.0E+00	A1825504.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
							wb17g05.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305976 3' similar to TR-O76363 O76363 AIBC1.;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7650	20881	34283	0.73	0.0E+00	AI825504.1	EST_HUMAN	wh17g05.x1 NC1_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305876 3' similar to TR:O76383 O76383 AIBG1.;
7658	20889	34292	3.09	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
7665	20894	34298	0.98	0.0E+00	N76128.1	EST_HUMAN	z88605.61 Soares_fetal_lung_NbHL10W Homo sapiens cDNA clone IMAGE:289458 3'
7971	20910	34300	5.4	0.0E+00	BF217805.1	EST_HUMAN	601885465F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103728 5'
7978	20915	34306	0.53	0.0E+00	BF568882.1	EST_HUMAN	602185808F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310286 5'
7981	20920	34311	3.8	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
8006	20893	34338	0.97	0.0E+00	AW068274.1	EST_HUMAN	cr42a09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42a09 3'
8006	25893	34339	0.97	0.0E+00	AW068274.1	EST_HUMAN	cr42a09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42a09 3'
8010	20948	34341	8.58	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8017	20855	34348	1.05	0.0E+00	AV759467.1	EST_HUMAN	AV759467 BM Homo sapiens cDNA clone BMFBGG05 5'
8020	20957	34350	5.84	0.0E+00	BE739870.1	EST_HUMAN	601683156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
8020	20957	34351	5.84	0.0E+00	BE739870.1	EST_HUMAN	601683156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
8021	20958	34352	0.88	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
8021	20958	34353	0.88	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
8022	20959	34354	3.3	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000855 5'
8022	20959	34355	3.3	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000855 5'
8048	20985	34361	2.13	0.0E+00	BF580287.1	EST_HUMAN	rab22a04.x1 Soares_NSF_F8_GW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3263214 3' similar to contains element TAR1 repetitive element;
8060	20987	34383	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884258 5'
8060	20987	34394	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884258 5'
8101	21037	34437	0.54	0.0E+00	AW666907.1	EST_HUMAN	EST388377 MAGE resequences, MAGE3 Homo sapiens cDNA
8123	21060	34458	0.52	0.0E+00	Y16795.1	NT	Homo sapiens psf1HtaA pseudogene
8128	21068	34468	0.49	0.0E+00	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
8130	21067	34467	0.69	0.0E+00	AU117933.1	EST_HUMAN	AU117933 HEMBA1 Homo sapiens cDNA clone HEMBA1001175 5'
8131	21068		0.52	0.0E+00	BE613983.1	EST_HUMAN	601604084F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3805733 5'
8146	21083	34482	4.38	0.0E+00	AW068044.1	EST_HUMAN	EST380119 MAGE resequences, MAGE1 Homo sapiens cDNA
8147	21084	34483	0.75	0.0E+00	A1193435.1	EST_HUMAN	HA2043 Human fetal liver cDNA library Homo sapiens cDNA
8186	21156	34555	0.64	0.0E+00	AU133187.1	EST_HUMAN	AU133187 NT2RP4 Homo sapiens cDNA clone NT2RP4001507 5'
8231	21200		0.66	0.0E+00	BF217200.1	EST_HUMAN	601885317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103683 5'
8244	21213	34620	0.87	0.0E+00	BE313013.1	EST_HUMAN	601160347F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503050 5'
8256	21225	34636	1.09	0.0E+00	AA149781.1	EST_HUMAN	z801c08.11 Stratiogene colon (8637204) Homo sapiens cDNA clone IMAGE:568410 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8288	21237	34848	0.88	0.0E+00	BF026628.1	EST_HUMAN	601672310F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955131 5'
8281	21250	34862	0.52	0.0E+00	AA017021.1	EST_HUMAN	z839408.t1 Soares retina N2b-4R Homo sapiens cDNA clone IMAGE:360831 5'
8289	21268	34880	2.28	0.0E+00	BE736048.1	EST_HUMAN	601305638F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3638803 5'
8314	21283	34895	2.42	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
8314	21283	34896	2.42	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
8344	21313	34727	0.74	0.0E+00	AW674681.1	EST_HUMAN	bb344d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:084652 084652
8344	21313	34728	0.74	0.0E+00	AW674681.1	EST_HUMAN	bb344d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:084652 084652
8351	21320	34734	2.47	0.0E+00	AA397551.1	EST_HUMAN	z81504.t1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
8353	21322	34735	0.92	0.0E+00	AW387131.1	EST_HUMAN	G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG [RETROVIRAL ELEMENT];
8358	21325		0.62	0.0E+00	AB020691.1	NT	MRO-ST0031-091089-003-af11 ST0031 Homo sapiens cDNA
8357	21328	34737	7.99	0.0E+00	AU142402.1	EST_HUMAN	Homo sapiens mRNA for KIAA0884 protein, partial cds
8361	21330	34741	1.12	0.0E+00	BE388421.1	EST_HUMAN	AU142402 Y78AA1 Homo sapiens cDNA clone Y78AA100277 5'
8361	21330	34742	1.12	0.0E+00	BE388421.1	EST_HUMAN	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
8376	21345	34756	0.49	0.0E+00		NT	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
8378	21347	34758	0.92	0.0E+00	W95278.1	EST_HUMAN	Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 1 (KIR2DS1), mRNA
8378	21347	34759	0.92	0.0E+00	W95278.1	EST_HUMAN	z805401.t1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
8380	21349		17.98	0.0E+00	BF673086.1	EST_HUMAN	z805401.t1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
8384	21353		0.95	0.0E+00	AU134114.1	EST_HUMAN	602163008F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294128 5'
8388	21367	34776	1.71	0.0E+00	BF525534.1	EST_HUMAN	AU134114 OVARC1 Homo sapiens cDNA clone OVARC1001286 5'
8388	21367	34777	1.71	0.0E+00	BF525534.1	EST_HUMAN	602068632F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4212727 5'
8430	21369	34810	1.65	0.0E+00	AL120124.1	EST_HUMAN	602068632F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4212727 5'
8430	21369	34811	1.65	0.0E+00	AL120124.1	EST_HUMAN	DKF7p761P082.t1 761 (synonym: hamy2) Homo sapiens cDNA clone DKF7p761P082 5'
8473	21442		1.24	0.0E+00	BE877683.1	EST_HUMAN	DKF7p761P082.t1 761 (synonym: hamy2) Homo sapiens cDNA clone DKF7p761P082 5'
8497	21455	34881	1.91	0.0E+00	AW500549.1	EST_HUMAN	601485254F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887773 5'
8505	21473	34887	10.07	0.0E+00	AW157233.1	EST_HUMAN	UH-IF-BND-ak4-01-0-U1.t1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077486 5'
8523	21491	34906	0.67	0.0E+00	AW072395.1	EST_HUMAN	ai03608.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:3077486 5'
8541	21508	34826	1.06	0.0E+00		NT	TR:080463 080463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE [1];
8544	21512	34829	0.83	0.0E+00	W01616.1	EST_HUMAN	z807412.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2587636 3' similar to contains element ORF repetitive element;
					11421722	NT	Homo sapiens centrosomal protein 2 (CEP2), mRNA
					W01616.1	EST_HUMAN	z838405.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284633 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8546	21514	34931	1.28	0.0E+00	BE745597.1	EST_HUMAN	601678105F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8546	21514	34932	1.28	0.0E+00	BE745597.1	EST_HUMAN	601678105F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8559	21627	34946	1.2	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8578	21546	34965	0.44	0.0E+00	D45032.1	NT	Human DNA for ceruloplasmin, exon 5
8599	21567	34983	1.08	0.0E+00	A367350.1	EST_HUMAN	KIAA0164 PROTEIN.;
8610	21578	34994	2.6	0.0E+00	BE674157.1	EST_HUMAN	7d76a04.x1 NCL CGAP_L124 Homo sapiens cDNA clone IMAGE:3278882 3' similar to TR:Q14673 Q14673
8612	21580	34998	1.22	0.0E+00	A1886671.1	EST_HUMAN	W60b10.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2428275 3' similar to SW:COGT_HUMAN P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR.;
8625	21593	35012	1.28	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8625	21593	35013	1.28	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8633	21601	35023	1.83	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8633	21601	35024	1.83	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8635	21603	35026	1.35	0.0E+00	AA403192.1	EST_HUMAN	z68102.l1 Soares, total_fetus_Nb24-IFB_9w Homo sapiens cDNA clone IMAGE:768619 5' similar to TR:G1304132 G1304132 TPRD.;
8635	21603	35027	1.35	0.0E+00	AA403192.1	EST_HUMAN	z68102.l1 Soares, total_fetus_Nb24-IFB_9w Homo sapiens cDNA clone IMAGE:768619 5' similar to TR:G1304132 G1304132 TPRD.;
8676	21644		3.68	0.0E+00	AA398511.1	EST_HUMAN	z173a08.s1 Soares, testis_NHT Homo sapiens cDNA clone IMAGE:727958 3' similar to gb:S85855
8685	21653	35076	0.53	0.0E+00	BE837593.1	EST_HUMAN	PROHIBITIN (HUMAN);
8686	21654	35077	1.25	0.0E+00	AW384874.1	EST_HUMAN	RC2-FN0094-120600-013-h07 FN0094 Homo sapiens cDNA
8686	21654	35078	1.26	0.0E+00	AW384874.1	EST_HUMAN	QV3-DT0045-221289-046-c07 DT0045 Homo sapiens cDNA
8705	21673	35097	1.26	0.0E+00	BE612586.1	EST_HUMAN	QV3-DT0045-221289-046-c07 DT0045 Homo sapiens cDNA
8705	21673	35098	1.26	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3858179 5'
8720	21698	35115	1.86	0.0E+00	AL163209.2	NT	601452412F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3858179 5'
8720	21698	35116	1.65	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8730	21698	35123	0.7	0.0E+00	A1884477.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
8737	21705	35128	0.85	0.0E+00	AA502294.1	EST_HUMAN	Wm33a11.x1 NCL CGAP_U14 Homo sapiens cDNA clone IMAGE:2457724 3' similar to TR:O75457 O75457
8742	21710		0.57	0.0E+00	11416789	NT	CYTOSOLIC PHOSPHOLIPASE A2-GAMMA.;
8749	21717	35140	0.89	0.0E+00	A1680780.1	EST_HUMAN	nc26d10.s1 NCL CGAP_C03 Homo sapiens cDNA clone IMAGE:882269 3' similar to TR:G1139434
8752	21720		1.97	0.0E+00	BE860787.1	EST_HUMAN	G1139434 KIAA0167 PROTEIN.;
							Homo sapiens proboscoidin beta 3 (PCDH3), mRNA
							ta04f11.x1 Soares, pregnant_uterus_Nb14-IFU Homo sapiens cDNA clone IMAGE:2043117 3'
							601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916589 5'

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8778	21745	35168	0.55	0.0E+00	AW245785.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8778	21745	35167	0.55	0.0E+00	AW245785.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8779	21746	35168	2.62	0.0E+00	4758686	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8779	21746	35169	2.62	0.0E+00	4758686	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8783	21750	35172	0.52	0.0E+00	U98084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8783	21750	35173	0.52	0.0E+00	U98084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8851	21818	35238	1.02	0.0E+00	AJ251780.1	NT	Homo sapiens NESP55, GNAS1 antisense (partial) and Xlaphas (partial) genes
8856	21823	35244	3	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8856	21823	35245	3	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8856	21823	35246	3	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8871	21838	35260	1.82	0.0E+00	U82979.1	NT	Human immunoglobulin-like transcript-3 mRNA, complete cds
8913	21879	35305	1.16	0.0E+00	AF022855.1	NT	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
8913	21879	35306	1.16	0.0E+00	AF022855.1	NT	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
8916	21882	35308	0.68	0.0E+00	AU131671.1	EST_HUMAN	AU131671 NT2RP3 Homo sapiens cDNA clone NT2RP3003016 5'
8931	21897	35325	0.81	0.0E+00	11428572	NT	Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA
8935	21901		1.53	0.0E+00	AW513513.1	EST_HUMAN	xx46a01.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2707032 3' similar to gb:M14123_cds4
8937	21903		0.55	0.0E+00	BE783232.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
8938	21904	35328	11.32	0.0E+00	D52850.1	EST_HUMAN	601472160F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874912 5'
8968	21935	35361	3.89	0.0E+00	BE378495.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-084C02
8976	21941	35365	3.98	0.0E+00	AA410545.1	EST_HUMAN	601238488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608709 5'
8977	21943		3.27	0.0E+00	BF313946.1	EST_HUMAN	z32604.t1 Soares ovary tumor NthOT Homo sapiens cDNA clone IMAGE:724062 5'
8984	21950	35374	1.37	0.0E+00	11424387	NT	601900571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126744 5'
8989	21955	35379	1.38	0.0E+00	AW139673.1	EST_HUMAN	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
8989	21955	35380	1.38	0.0E+00	AW139673.1	EST_HUMAN	U1-HB11-adr-e-12-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8994	21960		0.61	0.0E+00	A1640180.1	EST_HUMAN	U1-HB11-adr-e-12-0-U1.e1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
9013	21978	35398	3.23	0.0E+00	BF377897.1	EST_HUMAN	ves30b10.x1 NCI_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2289579 3' similar to TR-O15044
9022	21988	35410	0.45	0.0E+00	AL163301.2	NT	O15044 KIAA0335.
9028	21994	35414	2.33	0.0E+00	BE260272.1	EST_HUMAN	CM1-TN0141-250900-430-608 TN0141 Homo sapiens cDNA
9033	21999	35418	2.98	0.0E+00	BF700165.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C101
9033	21999	35419	2.98	0.0E+00	BF700165.1	EST_HUMAN	601150051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3902836 5'
							602127684F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:4284542 5'
							602127684F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4284542 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9033	21869	35420	2.98	0.0E+00	BF700105.1	EST_HUMAN	602127684F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
9047	22013	35436	0.63	0.0E+00	AI458722.1	EST_HUMAN	IK13H11.x1 NC1_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2150949 3'
9076	22042	35465	0.7	0.0E+00	AL448770.1	EST_HUMAN	AL448770 Homo sapiens fetal brain (Stavrides GS) Homo sapiens cDNA
9084	22050	35472	12.98	0.0E+00	AA982527.1	EST_HUMAN	cr60g02.s1 NC1_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1602194 3' similar to gbM36072 80S
9090	22056	35480	4.79	0.0E+00	10947037	NT	RIBOSOMAL PROTEIN L7A (HUMAN);
9090	22056	35481	4.79	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
9114	22080	35508	1.23	0.0E+00	Y11107.3	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
9116	22082	35510	2.41	0.0E+00	BE278917.1	EST_HUMAN	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
9128	22092		3.32	0.0E+00	AV716377.1	EST_HUMAN	601158330F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139794 5'
9132	22098	35525	3.36	0.0E+00	AW337277.1	EST_HUMAN	AV716377 FHTB Homo sapiens cDNA clone FHTBAAF11 5'
9138	22104	35530	1.56	0.0E+00	AU124051.1	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
9214	22180	35611	0.86	0.0E+00	AU140704.1	EST_HUMAN	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
9224	22190	35620	0.55	0.0E+00	AB007823.1	NT	AU140704 PLACE4 Homo sapiens cDNA clone PLACE4000089 5'
9228	22195	35624	0.61	0.0E+00	R17132.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
9228	22195	35625	0.61	0.0E+00	R17132.1	EST_HUMAN	Yg09e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:31674 5'
9233	22199	35627	5.11	0.0E+00	AW592233.1	EST_HUMAN	Yg09e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:31674 5'
9233	22199	35628	5.11	0.0E+00	AW592233.1	EST_HUMAN	Yg09e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:2835098 3'
9269	22235	35684	0.46	0.0E+00	AU126804.1	EST_HUMAN	Yg09e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:2835098 3'
9281	22247	35676	0.89	0.0E+00	AV714784.1	EST_HUMAN	AV714784 DCB Homo sapiens cDNA clone DCBAUA08 6'
9296	22262	35690	3.01	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814_s1 434 (synonym: hias3) Homo sapiens cDNA clone DKFZp434C1814 3'
9298	22262	35691	3.01	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814_s1 434 (synonym: hias3) Homo sapiens cDNA clone DKFZp434C1814 3'
9302	22267	35697	1.27	0.0E+00	AF133901.1	NT	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
9304	22269	35700	1.89	0.0E+00	AB040845.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9310	22275	35707	2.24	0.0E+00	BF679505.1	EST_HUMAN	602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274708 6'
9312	22277		0.92	0.0E+00	BF058289.1	EST_HUMAN	7K28403.x1 NC1_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3476692 3' similar to TR-038448 038448
9342	22307	35733	4.84	0.0E+00	11422857	NT	S GAG ;
9352	22317	35743	1.44	0.0E+00	K01241.1	NT	Homo sapiens tumor protein p73 (TP73), mRNA
9361	22328	35754	4.23	0.0E+00	AB020630.1	NT	Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
9361	22326	35755	4.23	0.0E+00	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
9368	22331	35761	1.71	0.0E+00	AV660739.1	EST_HUMAN	Homo sapiens mRNA for KIAA0823 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9372	22337	35767	3.07	0.0E+00	7708938	NT	Homo sapiens polycystin-L (PKDL), mRNA
9377	22342	35772	2.22	0.0E+00	BE793308.1	EST_HUMAN	601588304F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942553 5'
9378	22343	35773	0.46	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
9378	22343	35774	0.46	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
9391	22356		0.88	0.0E+00	HT39337.1	EST_HUMAN	yu03108.L1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:232767 5'
9401	22366	35788	4.19	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
9401	22366	35789	4.19	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
9411	22376	35814	0.59	0.0E+00	BE012721.1	EST_HUMAN	601452582F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3856100 5'
9411	22376	35815	0.59	0.0E+00	BE012721.1	EST_HUMAN	601452582F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3856100 5'
9414	22378		0.52	0.0E+00	M88688.1	NT	Human polymorphic loci in Xq28
9416	22381	35819	1.74	0.0E+00	X14768.1	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
9433	22397	35835	0.5	0.0E+00	AU127098.1	EST_HUMAN	AU127098 NT2RP2 Homo sapiens cDNA clone NT2RP2000578 5'
9437	22401	35839	1.29	0.0E+00	AI061396.1	EST_HUMAN	an29604.X1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700094-3'
9442	22406	35843	1.86	0.0E+00	A1854607.1	EST_HUMAN	wg84at12.X1 NCI_QGAP_G08 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW-MGB3_HUMAN
9447	22411	35848	4.1	0.0E+00	9256595	NT	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
9458	22422	35860	1.18	0.0E+00	AW868311.1	EST_HUMAN	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
9468	22432	35870	4.72	0.0E+00	9635487	NT	EST370381 MAGE resequences, MAGE Homo sapiens cDNA
9484	22448	35888	1.44	0.0E+00	AU142882.1	EST_HUMAN	Human endogenous retrovirus, complete genome
9489	22463	35904	1.46	0.0E+00	11436895	NT	AU142882 Y78AA1 Homo sapiens cDNA clone Y78AA1000878 5'
9500	22464		0.8	0.0E+00	BE410768.1	EST_HUMAN	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9513	22476	35921	1.29	0.0E+00	BF002024.1	EST_HUMAN	601301676F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636163 5'
9527	22480	35937	1.25	0.0E+00	AB011150.1	NT	7997112.X1 NCI_QGAP_C016 Homo sapiens cDNA clone IMAGE:3314471 3' similar to TRC8UJH82
9528	22491	35938	4.85	0.0E+00	BE794823.1	EST_HUMAN	Q8UJH82 HYPOTHETICAL 42.5 KD PROTEIN ;
9534	22497	35945	1.04	0.0E+00	AU136229.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9539	22502	35950	1.36	0.0E+00	BE883843.1	EST_HUMAN	601588294F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'
9539	22502	35951	1.36	0.0E+00	BE883843.1	EST_HUMAN	AU136228 PLACE1 Homo sapiens cDNA clone PLACE1003804 5'
9557	22519	35967	0.77	0.0E+00	AB011168.1	NT	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9561	22523	35971	3.53	0.0E+00	AA344601.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9561	22523	35972	3.53	0.0E+00	AA344601.1	EST_HUMAN	Homo sapiens mRNA for KIAA0594 protein, partial cds
9561	22523						EST50505 Gall bladder I Homo sapiens cDNA 5' end
9561	22523						EST50505 Gall bladder I Homo sapiens cDNA 5' end
9561	22523						ba54408.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR-O60275 O60275
9619	22563	36011	1.02	0.0E+00	AW673468.1	EST_HUMAN	KIAA0522 PROTEIN ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9619	22563	36012	1.02	0.0E+00	AW873469.1	EST_HUMAN	baf54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60276 O60276 KIAA0522 PROTEIN;
9653	22598	36044	4.71	0.0E+00	BE207063.1	EST_HUMAN	baf09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9653	22596	36045	4.71	0.0E+00	BE207063.1	EST_HUMAN	baf09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9664	22621	36275	1.77	0.0E+00	BF348013.1	EST_HUMAN	602023150F1 NCL CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4158300 5'
9700	22653	36107	2.9	0.0E+00	BE712515.1	EST_HUMAN	QV2-HT0688-250700-282-508 HT0688 Homo sapiens cDNA
9732	22760	36213	0.86	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3659035 5'
9732	22760	36214	0.86	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3659035 5'
9738	22768	36221	0.53	0.0E+00	AI066351.1	EST_HUMAN	RC-BT108-040399-032 BT108 Homo sapiens cDNA Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9741	22769	36223	3.69	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9741	22769	36224	3.69	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9761	22692	36149	2.54	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_J1 434 (synonym: htss3) Homo sapiens cDNA clone DKFZp434L0120 5'
9766	22727	36183	2.35	0.0E+00	AI088043.1	EST_HUMAN	aw80h01.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1661248 3' similar to TR:Q14677 Q14677 KIAA0171 PROTEIN;
9793	21116	34515	0.85	0.0E+00	BF308962.1	EST_HUMAN	601892245F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4139068 5'
9795	21118	34518	2.64	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9795	21118	34519	2.64	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9797	21120	34522	20.82	0.0E+00	AI209008.1	EST_HUMAN	qm08a04.x1 NCL CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1661288 3' similar to SW:RL2B_HUMAN P28316 60S RIBOSOMAL PROTEIN L23A;
9797	21120	34523	20.82	0.0E+00	AI209008.1	EST_HUMAN	qm08a04.x1 NCL CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1661288 3' similar to SW:RL2B_HUMAN P28316 60S RIBOSOMAL PROTEIN L23A;
9798	21121	34524	3.57	0.0E+00	AW953836.1	EST_HUMAN	EST366028 MAGC resequences, MAGC Homo sapiens cDNA
9825	22674	36129	3.43	0.0E+00	AF163468.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
9828	22677	36133	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9828	22677	36134	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9837	22773		22.2	0.0E+00	BE265929.1	EST_HUMAN	601109942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
9840	22776	36231	1.35	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3970007 5'
9840	22776	36232	1.35	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3970007 5'
9843	22779	36234	30.94	0.0E+00	AW163779.1	EST_HUMAN	aa86c04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:V36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9854	22790	36242	0.44	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9867	22803	36257	3.12	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
9885	22838	36293	4.11	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5505
9885	22838	36294	4.11	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5505
9887	22840	36297	2.82	0.0E+00	BE746215.1	EST_HUMAN	601576683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3827548 5'
9897	22850	36307	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9897	22850	36308	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9897	22850	36309	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9817	22738	36101	1.49	0.0E+00	BE000549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3856238 5'
9835	22862	36323	0.61	0.0E+00	AV701829.1	EST_HUMAN	AV701829 ADB Homo sapiens cDNA clone ADBBYH01 5'
9847	22874	36338	2.59	0.0E+00	AF018084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9847	22874	36338	2.59	0.0E+00	AF018084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9880	22807	36372	1.86	0.0E+00	BE082977.1	EST_HUMAN	RC2-BT0842-130300-017-g01 BT0842 Homo sapiens cDNA
9899	22826	36392	2.65	0.0E+00	AW500283.1	EST_HUMAN	UHF-BND-ekg-b-12-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9899	22826	36393	2.65	0.0E+00	AW500283.1	EST_HUMAN	UHF-BND-ekg-b-12-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
10008	22835	36398	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10008	22835	36400	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10010	22837	36401	0.76	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
10010	22837	36402	0.76	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
10019	22846	36413	0.52	0.0E+00	W56629.1	EST_HUMAN	zd16811.1 Soares_fetal_heart_NIH-H19W Homo sapiens cDNA clone IMAGE:340844 5'
10019	22846	36414	0.52	0.0E+00	W56629.1	EST_HUMAN	zd16811.1 Soares_fetal_heart_NIH-H19W Homo sapiens cDNA clone IMAGE:340844 5'
10032	22859	36427	1.05	0.0E+00	AB033358.1	NT	Homo sapiens mRNA for neuridin I-alpha protein, complete cds
10036	22863		0.56	0.0E+00	AI124780.1	EST_HUMAN	am56a11.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539548 3'
10036	22865	36432	2.73	0.0E+00	AW500526.1	EST_HUMAN	UHF-BND-ekg-c-07-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077384 5'
10082	23009	36461	1.51	0.0E+00	AF009688.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
10109	23035	36512	2.37	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
10109	23035	36513	2.37	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
10112	23038	36518	3.13	0.0E+00	BE563320.1	EST_HUMAN	601334603F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688680 5'
10132	23058	36535	1.42	0.0E+00	AW363136.1	EST_HUMAN	CM2-CT0311-301189-043-ht1 CT0311 Homo sapiens cDNA
10152	23077	36553	0.61	0.0E+00	11436432	NT	Homo sapiens multimetric (MMRN), mRNA

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Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10153	23078	36554	1.71	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
10162	23087	36564	0.82	0.0E+00	BE208710.1	EST_HUMAN	bb26c01.x1 NIH_MGC_5 Homo sapiens cDNA clone IMAGE:2884000 3'
10178	23103	36583	2.6	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
10178	23103	36584	2.6	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
10187	23112	36596	1.82	0.0E+00	AW500936.1	EST_HUMAN	UHLF-BP0p-4-05-0-UI1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072897 5'
10193	23118	36602	18.11	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3046383 5'
10193	23118	36603	18.11	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3046383 5'
10194	23119	36604	0.45	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
10194	23119	36605	0.45	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
10208	23131	36618	1.78	0.0E+00	7882067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
10224	23149	36638	3.6	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L0120 5'
10228	23154	36644	0.71	0.0E+00	AL041084.2	EST_HUMAN	DKFZp434B2416.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B2416 5'
10239	23164	36651	2.57	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
10240	23165	36652	2.44	0.0E+00	AF152308.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
10268	23193	36680	5.52	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
10268	23193	36681	5.52	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
10284	23209	36694	2.5	0.0E+00	BF082888.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
10314	23238	36720	2.73	0.0E+00	BE280793.1	EST_HUMAN	601288351F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
10323	23247	36726	1.2	0.0E+00	BE388700.1	EST_HUMAN	601288351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
10323	23247	36727	1.2	0.0E+00	BE388700.1	EST_HUMAN	601288351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
10332	23258	36733	3.64	0.0E+00	AW296280.1	EST_HUMAN	372501.x1 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2688977 3' similar to gb:U02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
10333	23257	36734	0.75	0.0E+00	AA341305.1	EST_HUMAN	EST46740 Fetal kidney II Homo sapiens cDNA 5' end
10342	23266	36745	0.83	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
10363	23286	36763	0.75	0.0E+00	AW984113.1	EST_HUMAN	EST976186 IMAGE resequencing, MAGH Homo sapiens cDNA
10376	23289	36774	7.08	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
10376	23289	36775	7.08	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
10379	23302	36778	13.11	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIR2C gene, exons 2, 3, and 4
10382	23304	36780	2.8	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
10382	23304	36781	2.8	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
10416	23338	36824	3.43	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
10416	23338	36825	3.43	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
10432	23354	36839	2.24	0.0E+00	AJ285944.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10432	23354	36840	2.24	0.0E+00	AI286844.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/Importin7 and partial ZNF143 gene
10437	23359	36847	0.76	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKCC Homo sapiens cDNA clone GKCDXA07 5'
10437	23359	36848	0.75	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKCC Homo sapiens cDNA clone GKCDXA07 5'
10443	23365	36855	0.76	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
10445	23367	36858	2.64	0.0E+00	AA198387.1	EST_HUMAN	z097h11.1 Stragane muscle 837209 Homo sapiens cDNA clone IMAGE:628197 5'
10470	23392	36887	1.78	0.0E+00	AA131248.1	EST_HUMAN	z31071.1 Scores_pregnant_uterus_Nib-IPU Homo sapiens cDNA clone IMAGE:603545 5'
10470	23392	36888	1.78	0.0E+00	AA131248.1	EST_HUMAN	z31071.1 Scores_pregnant_uterus_Nib-IPU Homo sapiens cDNA clone IMAGE:603545 5'
10517	23439	36937	1.79	0.0E+00	AF178308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
10561	23493	36978	0.88	0.0E+00	BE880858.1	EST_HUMAN	601481565F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3803657 5'
10573	23495	36987	11.49	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 6'
10573	23495	36988	11.49	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
10578	23500	36992	0.62	0.0E+00	AU127403.1	EST_HUMAN	AU127403 NT2RP2 Homo sapiens cDNA clone NT2RP2001212 5'
10588	23510	37003	0.86	0.0E+00	BE986511.1	EST_HUMAN	601645134F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3630177 5'
10588	23510	37004	0.86	0.0E+00	BE986511.1	EST_HUMAN	601645134F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3630177 5'
10605	23527	37023	0.98	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3617453 5'
10616	23558	37037	0.98	0.0E+00	AA311624.1	EST_HUMAN	EST182353 Jurkat T-cells VI Homo sapiens cDNA 5' end
10617	23559	37038	0.56	0.0E+00	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
10629	23551	37051	0.78	0.0E+00	BE891113.1	EST_HUMAN	601432228F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917698 5'
10632	23554	37054	1.19	0.0E+00	11560161	NT	Homo sapiens hypodermal C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10642	23594	37060	1.39	0.0E+00	AB028280.1	NT	Homo sapiens mRNA for actin binding protein ABP820, complete cds
10643	23565	37061	0.6	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918 5'
10643	23565	37062	0.6	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918 5'
10650	23572	37067	4.13	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10650	23572	37068	4.13	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10658	23580	37077	1.27	0.0E+00	AA704457.1	EST_HUMAN	416008.e1 Scores_fetal_liver_spleen_1NFUS_S1 Homo sapiens cDNA clone IMAGE:460707 3' similar to gb:AF14123_cds1 RETROVIRUS-RELATED GAG POLYPROTEIN (HUMAN);
10660	23582	37078	1.19	0.0E+00	M22821.1	NT	Human beta 1,4-galactosyl-transferase mRNA, complete cds
10662	23584	37081	4.52	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4184939 5'
10662	23584	37082	4.52	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4184939 5'
10687	23609	37103	5.24	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824578 5'
10687	23609	37104	5.24	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824578 5'
10719	23641	37134	0.48	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DC8 Homo sapiens cDNA clone DC8BDDC08 5'
10719	23641	37135	0.48	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DC8 Homo sapiens cDNA clone DC8BDDC08 5'

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10750	23672	37167	1.13	0.0E+00	AI631818.1	EST_HUMAN	w36e03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10750	23672	37168	1.13	0.0E+00	AI631818.1	EST_HUMAN	Q61204 NOTCH2-LIKE;
10764	23685	37181	2	0.0E+00	T03078.1	EST_HUMAN	w36e03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10769	23710	37212	0.67	0.0E+00	AU122429.1	EST_HUMAN	Q61204 NOTCH2-LIKE;
10795	23718	37218	0.43	0.0E+00	6005921	NT	FB23A4 Fetal brain, Stratiene Homo sapiens cDNA clone FB23A4 3'end
10817	23738	37241	2.63	0.0E+00	BF436218.1	EST_HUMAN	AU122429 MAMMA1 Homo sapiens cDNA clone MAMMA1002368 5'
10818	23739		1.3	0.0E+00	AV654765.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF Interacting) (TRIO), mRNA
							h3b45e12.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3265271 3'
							AV654765 GLC Homo sapiens cDNA clone GLCD207 3'
10837	23757	37257	5.03	0.0E+00	AW517860.1	EST_HUMAN	ku74801.x1 NCL_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69088 MOESIN (HUMAN);
10841	23761	37261	18.38	0.0E+00	BE549213.1	EST_HUMAN	801078784F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
10858	23778	37278	0.84	0.0E+00	11436005	NT	Homo sapiens hypothetical protein DKFZp761P1010 (DKFZp761P1010), mRNA
10863	23803	37307	0.44	0.0E+00	X98683.1	NT	H. sapiens mRNA for NK receptor (183 Acd)
10884	23804	37308	4.15	0.0E+00	BE781742.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
10903	23823	37334	3.07	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-160200-012-d03 BT0842 Homo sapiens cDNA
10903	23823	37335	3.07	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-160200-012-d03 BT0842 Homo sapiens cDNA
10910	23830	37343	0.56	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10915	23835	37351	0.7	0.0E+00	AI658880.1	EST_HUMAN	its4e07.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2244612 3'
10922	23842	37358	1.6	0.0E+00	BE743215.1	EST_HUMAN	801673895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835188 5'
10922	23842	37359	1.6	0.0E+00	BE743215.1	EST_HUMAN	801673895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835188 5'
10925	23845	37360	0.97	0.0E+00	BE617655.1	EST_HUMAN	801441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845958 3'
10925	23845	37361	0.97	0.0E+00	BE617655.1	EST_HUMAN	801441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845958 3'
10946	23866	37380	0.55	0.0E+00	H39805.1	EST_HUMAN	yp01a10.t1 Scores_breast_3NbrHst Homo sapiens cDNA clone IMAGE:189138 5'
10960	23880	37393	0.48	0.0E+00	AW748117.1	EST_HUMAN	QV0-BT0107-230788-007-c08 BT0107 Homo sapiens cDNA
10972	23892	37408	1.16	0.0E+00	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10973	23893	37407	0.48	0.0E+00	AF081384.1	NT	Synthetic construct CD30 ligand-exon1 A fusion protein (CD30L-ETA fusion) mRNA, partial cds
10994	23914	37430	0.46	0.0E+00	AW342141.1	EST_HUMAN	EST 00007 Human differential display products Homo sapiens cDNA clone UNICDD7
10994	23914	37431	0.46	0.0E+00	AW342141.1	EST_HUMAN	EST 00007 Human differential display products Homo sapiens cDNA clone UNICDD7
10999	23955	37489	1.72	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAK905 5'
10999	23955	37490	1.72	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAK905 5'
11001	23967	37496	3.29	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
11007	23972	37496	6.07	0.0E+00	AW893563.1	EST_HUMAN	EST376638 IMAGE resequences, MAGH Homo sapiens cDNA
11019	23984	37510	1.81	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11019	23984	37511	1.81	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11023	23988	37516	1.78	0.0E+00	AW057821.1	EST_HUMAN	wy61f09.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TRC080568 Q80568 VDX;
11029	23993	37520	1.98	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D00917 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP00917
11030	23994	37521	2.54	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
11030	23994	37522	2.54	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
11034	23998	37525	2.13	0.0E+00	BF306842.1	EST_HUMAN	801888704F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122849 5'
11041	24005	37531	3.83	0.0E+00	11648811	NT	Homo sapiens NOD2 protein (NOD2), mRNA
11041	24005	37532	3.83	0.0E+00	11545811	NT	Homo sapiens NOD2 protein (NOD2), mRNA
11055	24018	37541	5.31	0.0E+00	AW404705.1	EST_HUMAN	UI-HF-BL0-acm-d-04-Q-JL1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058383 5'
11058	24021	37544	2.69	0.0E+00	11424828	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
11058	24022	37545	7.34	0.0E+00	4504538	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
11059	24022	37546	7.34	0.0E+00	4504538	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
11060	24023	37547	2.71	0.0E+00	AI981827.1	EST_HUMAN	wu32b06.x1 Scores_Diackgraeia_colon_NHGD Homo sapiens cDNA clone IMAGE:2521715 3'
11063	24026	37551	1.64	0.0E+00	BE882108.1	EST_HUMAN	801605204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3805885 5'
11068	24028	37553	21.37	0.0E+00	BE891630.1	EST_HUMAN	801434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918636 5'
11068	24031	37554	4.59	0.0E+00	8823839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11068	24031	37555	4.59	0.0E+00	8823839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11083	18982	32151	5.57	0.0E+00	AA185805.1	EST_HUMAN	Zp95b11.1 Stratagene muscle 837208 Homo sapiens cDNA clone IMAGE:627833 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11103	24083	37586	100.2	0.0E+00	AA909080.1	EST_HUMAN	hw17c08.s1 NCL_CGAP_G080 Homo sapiens cDNA clone IMAGE:1240718 3' similar to gb:X57809 IG LAMBDA CHAIN C REGIONS (HUMAN);
11104	24084	37587	4.22	0.0E+00	BE793498.1	EST_HUMAN	801588829F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
11113	24073	37595	15.77	0.0E+00	AV727382.1	EST_HUMAN	AV727382 HTC Homo sapiens cDNA clone HTCAQH08 5'
11113	24073	37598	15.77	0.0E+00	AV727382.1	EST_HUMAN	AV727382 HTC Homo sapiens cDNA clone HTCAQH08 5'
11128	24086	37613	14.2	0.0E+00	AA484313.1	EST_HUMAN	Zp78b12.1 Scores ovary tumor NBH07 Homo sapiens cDNA clone IMAGE:808878 5' similar to gb:X72467 IG KAPPA CHAIN PRECURSOR V-J REGION (HUMAN);
11129	24089	37618	24.26	0.0E+00	AW518055.1	EST_HUMAN	Xy04g10.x1 NCL_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852226 3' similar to gb:M60854 40S RIBOSOMAL PROTEIN S16 (HUMAN);
11134	24094	37623	1.88	0.0E+00	AU135741.1	EST_HUMAN	AU185741 PLACE1 Homo sapiens cDNA clone PLACE1002794 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11139	24099	37628	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11139	24099	37627	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11139	24099	37628	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11141	24101	37629	1.68	0.0E+00	Z34897.1	NT	H1 sapiens mRNA for H1 histamine receptor
11142	24102	37630	2.54	0.0E+00	F13069.1	EST_HUMAN	HSC31C031 normalized infant brain cDNA Homo sapiens cDNA clone o-31c03
11159	24117	37643	2.4	0.0E+00	M27751.1	NT	Homo sapiens immunoglobulin kappa-chain A14 V-region precursor (IGKV) gene, partial cds
11159	24117	37644	2.4	0.0E+00	M27751.1	NT	Homo sapiens immunoglobulin kappa-chain A14 V-region precursor (IGKV) gene, partial cds
11167	24125	37654	40.1	0.0E+00	AW338094.1	EST_HUMAN	xw68f01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2832985 3' similar to gb:X17115 IG MU CHAIN C REGION (HUMAN);
11168	24126	37655	3.54	0.0E+00	AW451230.1	EST_HUMAN	UH-HB18-ali-e-01-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
11168	24126	37656	3.54	0.0E+00	AW451230.1	EST_HUMAN	UH-HB18-ali-e-01-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
11170	13316		8.04	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
11184	24140	37674	2.07	0.0E+00	BE298449.1	EST_HUMAN	601119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028219 5'
11186	24151	37682	2.13	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
11189	24154	37688	1.98	0.0E+00	Z20658.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
11208	24160	37690	1.68	0.0E+00	BE264905.1	EST_HUMAN	601163824F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538012 5'
11214	24167	37698	1.62	0.0E+00	BE792155.1	EST_HUMAN	6011632046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3836539 5'
11215	24168		70.33	0.0E+00	BF694081.1	EST_HUMAN	602141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302432 5'
11217	24170	37698	7.96	0.0E+00	AU116385.1	EST_HUMAN	AU116388 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
11218	24171		2.51	0.0E+00	AW236269.1	EST_HUMAN	xn72b01.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2896977 3' similar to gb:X02162_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
11223	24176	37702	4.92	0.0E+00	A1149809.1	EST_HUMAN	qf43cd03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
11223	24176	37703	4.92	0.0E+00	A1149809.1	EST_HUMAN	qf43cd03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
11224	24177	37704	2.09	0.0E+00	AW391937.1	EST_HUMAN	QV4-ST0234-121189-032-b06 ST0234 Homo sapiens cDNA
11234	24187		1.54	0.0E+00	AU116808.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
11238	24191	37710	9.23	0.0E+00	11424728	NT	Homo sapiens insulin receptor (INSR), mRNA
11244	24197	37716	145.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-JM0063-170400-191-406 UM0063 Homo sapiens cDNA
11244	24197	37717	145.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-JM0063-170400-191-406 UM0063 Homo sapiens cDNA
11245	24198	37718	3.26	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184979 5'
11247	24200	37721	49.07	0.0E+00	BE261209.1	EST_HUMAN	601146957F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
11251	24204	37726	1.74	0.0E+00	AB028040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
11258	24208	37731	6.12	0.0E+00	U50328.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
11257	24209	37732	1.72	0.0E+00	Z20556.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
11260	24212	37735	6	0.0E+00	BE773038.1	EST_HUMAN	RC1-FT0134-170700-012-407 FT0134 Homo sapiens cDNA
11260	24212	37736	6	0.0E+00	BE773038.1	EST_HUMAN	RC1-FT0134-170700-012-407 FT0134 Homo sapiens cDNA
11283	24233	37759	89.91	0.0E+00	AA740782.1	EST_HUMAN	ab32607.s1 NCL_CGAP_K045 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element
11285	24235	37762	39.54	0.0E+00	AW46822.1	EST_HUMAN	MSR1 repetitive element;
11281	24241	37768	2.85	0.0E+00	AF252303.1	NT	Hs04H04.x1 NCL_CGAP_K012 Homo sapiens cDNA clone IMAGE:2872768 3'
11304	24254	37780	1.84	0.0E+00	BE268478.1	EST_HUMAN	Homo sapiens signalling lymphocyte activation molecule (SLAM) gene, exon 2
11304	24254	37781	1.84	0.0E+00	BE268478.1	EST_HUMAN	601182748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536887 5'
11307	24257	37783	7.6	0.0E+00	C05089.1	EST_HUMAN	601182748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536887 5'
11313	24263	37789	1.91	0.0E+00	AA746375.1	EST_HUMAN	C05088 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC4817
11313	24263	37790	1.91	0.0E+00	AA746375.1	EST_HUMAN	oe56h01.1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
11321	24271	37798	1.66	0.0E+00	BF353825.1	EST_HUMAN	oe56h01.1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
11322	24272	37799	5.78	0.0E+00	AL157608.1	EST_HUMAN	QV2-HT0698-020800-285-d07 HT0698 Homo sapiens cDNA
11333	24283	37807	6.83	0.0E+00	AU116988.1	EST_HUMAN	DKFZp761J2116.1 761 (synonym: harny2) Homo sapiens cDNA clone DKFZp761J2116 5'
11347	24297	37825	1.54	0.0E+00	AU132437.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
11367	18866	32047	2.84	0.0E+00	AB035286.1	NT	AU132437 NT2RP3 Homo sapiens cDNA clone NT2RP3004422 5'
11367	18866	32048	2.84	0.0E+00	AB035286.1	NT	Homo sapiens mRNA for neuridin II, complete cds
11371	24318	37846	2.4	0.0E+00	BE182360.1	EST_HUMAN	Homo sapiens mRNA for neuridin II, complete cds
11371	24318	37847	2.4	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
11372	24319		1.48	0.0E+00	AV701152.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
11387	24334	37863	75.44	0.0E+00	AW406380.1	EST_HUMAN	AV701152 ADA Homo sapiens cDNA clone ADAAA008 5'
11390	24336	37865	2.81	0.0E+00	BE868423.1	EST_HUMAN	UIHF-BL0-acc-c-09-0-UI.1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3060088 5'
11397	24342	37874	2.28	0.0E+00	AW500307.1	EST_HUMAN	60143902F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824142 5'
11397	24342	37875	2.28	0.0E+00	AW500307.1	EST_HUMAN	UIHF-BNO-ekg-d-02-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							UIHF-BNO-ekg-d-02-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							b678c04.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048486 5' similar to gb:Y00345 cds1
11398	24343	37876	7.11	0.0E+00	BE018293.1	EST_HUMAN	POLYADENYLATE-BINDING PROTEIN (HUMAN); gb:J05553 M.musculus mRNA for poly(A) binding protein (MOUSE)
11417	24361	37898	14.52	0.0E+00	X59314.1	NT	H.sapiens gene for Ig kappa light chain variable region "011"
11421	24365	37900	2.3	0.0E+00	AU121677.1	EST_HUMAN	AU121677 MAMMA1 Homo sapiens cDNA clone MAMMA1000731 5'
11430	24374	37913	4.14	0.0E+00	BE897953.1	EST_HUMAN	601440446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3825403 5'
11431	24375	37914	1.58	0.0E+00	A1459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
11431	24375	37915	1.58	0.0E+00	A1459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11441	24384	37824	4.83	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1_434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434L0120 5'
11446	24389	37831	4.18	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215. Homo sapiens cDNA clone 77E12
11446	24389	37832	4.18	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836216. Homo sapiens cDNA clone 77E12
11474	24417	37867	2.85	0.0E+00	4758827	NT	Homo sapiens neurabin III (NRXN3) mRNA
11475	24418	37868	3.38	0.0E+00	BF206561.1	EST_HUMAN	601870802F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
11478	24421	37870	12.88	0.0E+00	AW207734.1	EST_HUMAN	UI-H-B12-egs-b-01-0-UJ.s1 NCI CGAP Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
11479	24422	37871	5.09	0.0E+00	AW604975.1	EST_HUMAN	RCO-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
11479	24422	37872	5.09	0.0E+00	AW604975.1	EST_HUMAN	RCO-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
11483	24426	37875	2.91	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11483	24426	37876	2.91	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11484	24427	37877	3.54	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B
11484	24427	37878	3.54	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B
11506	24448	37898	2.13	0.0E+00	11024711	NT	58KDA-ASSOCIATED PROTEIN ;
11508	20670	34037	1.92	0.0E+00	L32832.1	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
11513	24454	38003	3.74	0.0E+00	BE148078.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
11513	24454	38004	3.74	0.0E+00	BE148078.1	EST_HUMAN	RC3-HT0230-040500-110-H04 HT0230 Homo sapiens cDNA
11523	24464	38017	7.84	0.0E+00	AA185605.1	EST_HUMAN	RC3-HT0230-040500-110-H04 HT0230 Homo sapiens cDNA
11531	24472	38023	1.51	0.0E+00	AW673468.1	EST_HUMAN	2p85b11.1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:627833 5' similar to gb:X03740
11531	24472	38024	1.51	0.0E+00	AW673468.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11549	24490	38046	5.23	0.0E+00	BF507878.1	EST_HUMAN	ba54408.y6 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275
11549	24490	38047	5.23	0.0E+00	BF507878.1	EST_HUMAN	KIAA0622 PROTEIN ;
11558	24496	38052	3.54	0.0E+00	AU135170.1	EST_HUMAN	ba54408.y6 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275
11560	24500	38056	1.84	0.0E+00	BF578138.1	EST_HUMAN	KIAA0522 PROTEIN ;
11560	24500	38057	1.84	0.0E+00	BF578138.1	EST_HUMAN	UI-H-B14-ack-b-10-0-UJ.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
11561	24501	38058	17.24	0.0E+00	BE578401.1	EST_HUMAN	UI-H-B14-ack-b-10-0-UJ.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
11561	24501	38059	17.24	0.0E+00	BE578401.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
11567	24507	38064	2.9	0.0E+00	D87882.1	NT	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
							602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
							601468828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
							601468828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
							Human mRNA for KIAA0241 gene, partial cds

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11571	24510		5.42	0.0E+00	BF240536.1	EST_HUMAN	601875630F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4089710 5'
11582	24520	38076	1.68	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11582	24520	38076	1.68	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11586	24524	38079	3.41	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11586	24524	38080	3.41	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11590	24528	38085	2.06	0.0E+00	BE122784.1	EST_HUMAN	23_08 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 23_08 5' similar to Homo sapiens cyclin B2 (CCNB2)
11591	24529	38086	3.23	0.0E+00	BE017660.1	EST_HUMAN	bb73h05.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3048057 5' similar to SW:CD97_HUMAN
11595	24533	38089	2.69	0.0E+00	AA772837.1	EST_HUMAN	P48960 LEUCOCYTE ANTIGEN CD97 PRECURSOR. [1];
11605	24543	38103	6.4	0.0E+00	4603544	NT	ae74g04.x1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:368942 3'
11612	24550	38110	2.25	0.0E+00	BF576287.1	EST_HUMAN	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A) mRNA
11615	24553	38114	5.5	0.0E+00	AW328173.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4286502 5'
11620	24558		83.29	0.0E+00	M55083.1	NT	dr04g05.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2847177 5'
11624	24562	38123	159.29	0.0E+00	AI680988.1	EST_HUMAN	Human gamma actin-like pseudogene, complete cds
11625	24563	38124	2.3	0.0E+00	BF306996.1	EST_HUMAN	wf20e11.x1 Soares Dieckgrafe_colon NHUC Homo sapiens cDNA clone IMAGE:2351180 3' similar to gb:M87789 IG GAMMA-1 CHAIN C REGION (HUMAN);
11625	24563	38125	2.3	0.0E+00	BF306996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11632	24568	38133	59.51	0.0E+00	BF362462.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11648	24585	38154	2.42	0.0E+00	U36284.1	NT	QV2-NH0054-230800-333-c04 NH0054 Homo sapiens cDNA
11648	24585	38155	2.42	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11654	24591		4.74	0.0E+00	BE897051.1	EST_HUMAN	Human beta-prime-adaptin (BAM22) gene, exon 16
11655	24601	38177	1.54	0.0E+00	8923698	NT	601439605F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824577 5'
11658	24604		2.24	0.0E+00	BF207682.1	EST_HUMAN	Homo sapiens golgin-like protein (GLP), mRNA
11658	24605		4.82	0.0E+00	BE257744.1	EST_HUMAN	601881947F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:4081716 5'
11682	24648	38225	4.13	0.0E+00	BE206846.1	EST_HUMAN	601116705F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357394 5'
11682	24648	38226	4.13	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11684	24650	38228	3.8	0.0E+00	AW753028.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11689	24655		4.96	0.0E+00	AA558707.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11680	18451	31322	3.12	0.0E+00	AI834954.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11691	24656	38234	9.26	0.0E+00	AW327695.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11711	25708	38254	1.83	0.0E+00	AW282778.1	EST_HUMAN	U14-BWO-aj-07-0-J1-1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729509 3'
11718	23915	37432	2.09	0.0E+00	4758827	NT	Homo sapiens neurabin III (NRXN3) mRNA
11724	24610	38188	2.43	0.0E+00	BE968909.2	EST_HUMAN	601689088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895918 3'
11724	24610	38187	2.43	0.0E+00	BE968909.2	EST_HUMAN	601689088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895918 3'
11725	24611	38188	3.67	0.0E+00	BE186556.1	EST_HUMAN	ILB-HT0731-020500-077-05 HT0731 Homo sapiens cDNA
11739	24624	38202	5.4	0.0E+00	ALD48540.1	EST_HUMAN	DKFZp434G178_1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434G178 5'
11739	24624	38203	5.4	0.0E+00	ALD48540.1	EST_HUMAN	DKFZp434G178_1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434G178 5'
11746	24631	38211	2.29	0.0E+00	BF082504.1	EST_HUMAN	MR4-BT0358-130900-018-a04 BT0358 Homo sapiens cDNA
11750	24635	38214	19.22	0.0E+00	AI923116.1	EST_HUMAN	wn83g03.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:S37431 LAMININ RECEPTOR (HUMAN);
11753	24681	38259	8.71	0.0E+00	AA780913.1	EST_HUMAN	nz11607.at1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287488 3' similar to TR-Q13688
11753	24681	38260	8.71	0.0E+00	AA780913.1	EST_HUMAN	Q13688 ALKB HOMOLOG PROTEIN.;
11758	24688	38266	3.51	0.0E+00	BE910548.1	EST_HUMAN	nz11607.at1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287488 3' similar to TR-Q13688
11768	23921	37440	5.45	0.0E+00	BE678347.1	EST_HUMAN	Q13688 ALKB HOMOLOG PROTEIN.;
11768	23924	37443	2.02	0.0E+00	BE615668.1	EST_HUMAN	601601090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902826 5'
11768	23924	37444	2.02	0.0E+00	BE615668.1	EST_HUMAN	7Z7H12.x1 NCI_CGAP_GLI1 Homo sapiens cDNA clone IMAGE:3285919 3' similar to TR-Q00409 O00409 CHECKPOINT SUPPRESSOR 1.;
11777	23932	37453	2.13	0.0E+00	AV757420.1	EST_HUMAN	601276335F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11808	24693	38273	5.01	0.0E+00	L39891.1	NT	601276335F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11808	24693	38274	5.01	0.0E+00	L39891.1	NT	AV757420 BM Homo sapiens cDNA clone BMFAGH03 5'
11822	24705	38287	3.67	0.0E+00	AU138211.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11835	24718	38304	5.81	0.0E+00	BE622317.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11860	24742	38326	2.22	0.0E+00	AI939634.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
11868	24750	38332	14.23	0.0E+00	BE748889.1	EST_HUMAN	601441098F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11868	24750	38333	14.23	0.0E+00	BE748889.1	EST_HUMAN	hm84c10.x5 NCI_CGAP_Brt25 Homo sapiens cDNA clone IMAGE:2165778 3'
11877	24758	38343	2.54	0.0E+00	AU141882.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838012 3'
11877	24759	38344	2.54	0.0E+00	AU141882.1	EST_HUMAN	601672186T1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3838012 3'
11880	24762	38347	1.97	0.0E+00	AW006022.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001388 5'
11882	25707	38349	2.38	0.0E+00	BF002933.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001388 5'
11888	24780	38368	1.48	0.0E+00	ALD43705.1	EST_HUMAN	wz81H01.x1 NCI_CGAP_Brt25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP-F63H10.2
							CE11040 ZINC FINGER, C2H2 TYPE.;
							7h22b10.x1 NCI_CGAP_Cor16 Homo sapiens cDNA clone IMAGE:3316889 3' similar to TR-Q13458 Q13458 TRIO.;
							DKFZp434L1227_1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434L1227 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11889	24780	38387	1.48	0.0E+00	AL049705.1	EST_HUMAN	DKFZp434L1227_1 434 (synonym: hnc3) Homo sapiens cDNA clone DKFZp434L1227 5'
11904	24785	38374	3.36	0.0E+00	AW387776.1	EST_HUMAN	MR4-ST0118-281089-012-b03 ST0118 Homo sapiens cDNA
11904	24786	38376	3.36	0.0E+00	AW387776.1	EST_HUMAN	MR4-ST0118-281089-012-b03 ST0118 Homo sapiens cDNA
11916	24797		2.43	0.0E+00	AW868777.1	EST_HUMAN	MR3-SN0010-310300-107-b03 SN0010 Homo sapiens cDNA
11927	24808	38402	4.22	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11927	24808	38403	4.22	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11932	24813	38409	5.01	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
11934	24815	38411	2.03	0.0E+00	BE378254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11934	24815	38412	2.03	0.0E+00	BE378254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11946	20655	34019	2.41	0.0E+00	AA211683.1	EST_HUMAN	zn6802.11 Stratiotes muscicola 837209 Homo sapiens cDNA clone IMAGE:582203 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11947	24828	38421	2.36	0.0E+00	AA488894.1	EST_HUMAN	aa55g11.s1 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824900 3' similar to gb:M37768 B-LYMPHOCTE ACTIVATION MARKER BLAST-1 PRECURSOR (HUMAN);
11952	24831	38427	2.35	0.0E+00	BE794758.1	EST_HUMAN	601580588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
11953	24832	38428	160.92	0.0E+00	BE879633.1	EST_HUMAN	601491821F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3894220 5'
11966	24844	38439	12.66	0.0E+00	BE406983.1	EST_HUMAN	601290403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629544 5'
11968	24845	38440	2.26	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11968	24845	38441	2.25	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11967	18847	31589	2.21	0.0E+00	D26335.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11967	18847	31590	2.21	0.0E+00	D26335.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11968	24846	38442	4.01	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4286725 5'
11968	24846	38443	4.01	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4286725 5'
11974	18348	31204	1.51	0.0E+00	AF272663.1	NT	Homo sapiens gephyrin mRNA, complete cds
11976	24853	38451	1.67	0.0E+00	AU132940.1	EST_HUMAN	AU132940 NT2RP4 Homo sapiens cDNA clone NT2RP4000928 5'
11978	24856	38453	4.83	0.0E+00	BE90372.1	EST_HUMAN	601676357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3658635 5'
11992	24869	38464	3.47	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127089 5'
11992	24869	38466	3.47	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127089 5'
11994	24871	38467	34.13	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11994	24871	38468	34.13	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
12008	24883		3.04	0.0E+00	BE060402.1	EST_HUMAN	601488553F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3900398 5'
12007	24894	38479	1.52	0.0E+00	BE82680.1	EST_HUMAN	601433908F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918321 5'
12035	25708		60.85	0.0E+00	BF308120.1	EST_HUMAN	601860534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131416 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12037	24912	38506	2.38	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-507 NN0025 Homo sapiens cDNA
12037	24912	38506	2.38	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-507 NN0025 Homo sapiens cDNA
12040	24915	38509	60.15	0.0E+00	BE297175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532968 5'
12048	24921	38517	1.81	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
12048	24921	38518	1.81	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
12062	24935	38531	1.81	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
12062	24936	38532	1.81	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
12067	24940	38535	1.83	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
12071	24944	38537	2.41	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215. Homo sapiens cDNA clone 77E12
12071	24944	38538	2.41	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215. Homo sapiens cDNA clone 77E12
12077	24949	38544	6.46	0.0E+00	BE545535.1	EST_HUMAN	601070381F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3459407 5'
12080	24952	38547	3.24	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002612 5'
12080	24952	38548	3.24	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002612 5'
12118	24988	38590	2.15	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
12124	24993	38595	2.27	0.0E+00	BE264888.1	EST_HUMAN	601183827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
12124	24993	38596	2.27	0.0E+00	BE264888.1	EST_HUMAN	601183827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
12131	25000	38605	6.45	0.0E+00	11419020	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA
12131	25000	38606	6.45	0.0E+00	11419020	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA
12146	25072	31299	1.81	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
12161	25819		1.43	0.0E+00	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C046
12163	25828		6.62	0.0E+00	AI190853.1	EST_HUMAN	qel17B12.x1 Soares fetal lung Nhl-19W Homo sapiens cDNA clone IMAGE:1739231 3'
12173	25022		1.33	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
12192	25037		2.28	0.0E+00	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C046
12201	25044		5.82	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12218	25058		3.47	0.0E+00	5802973	NT	Homo sapiens antitoxin protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
12251	25788	31523	2.06	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12265	25798		4.42	0.0E+00	AL041831.1	EST_HUMAN	DKFZp434K0819 J1 434 (synonym: htss3) Homo sapiens cDNA clone DKFZp434K0819 5'
12291	25940		3.76	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
12299	26110		5.96	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218 J1 434 (synonym: htss3) Homo sapiens cDNA clone DKFZp434G218 5'

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Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12314	25834		1.98	0.0E+00	AI903487.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
12357	25882		1.82	0.0E+00	N54484.1	EST_HUMAN	y40e08.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEV/M P10272 POL POLYPROTEIN;
12371	25157		5.98	0.0E+00	AF106658.1	NT	Homo sapiens adenylsuccinate lyase gene, complete cds
12374	13900	28857	3.44	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12374	13900	28858	3.44	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12383	25837		2.56	0.0E+00	10082587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
12411	13620		2.52	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12604	25787	31821	3.54	0.0E+00	AW590082.1	EST_HUMAN	hg31e08.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2947234 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
12534	25787		1.41	0.0E+00	L20493.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
12561	25831		2.82	0.0E+00	AF088787.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12597	25300		2.72	0.0E+00	8635487	NT	Human endogenous retrovirus, complete genome
12635	25823		1.47	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Stratsene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
12683	15027	28034	1.88	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12683	15027	28035	1.88	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12701	25381	31787	1.52	0.0E+00	AF088365.1	NT	Homo sapiens cavedin-3 (CAV3) mRNA, complete cds
12712	14723	27705	4.49	0.0E+00	H30132.1	EST_HUMAN	yc58e08.l1 Soares breast 3N1bHst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64089
12712	14723	27708	4.49	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12724	25377		52.99	0.0E+00	D50659.1	EST_HUMAN	yc58e08.l1 Soares breast 3N1bHst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64089
12725	25378	31743	3.63	0.0E+00	11418180	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12725	25378	31744	3.63	0.0E+00	11418180	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12739	15120	28141	2.42	0.0E+00	4768489	NT	Human gamma-cytoplasmic actin (ACTGP8) pseudogene
12780	25415		1.39	0.0E+00	AW684699.1	EST_HUMAN	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12818	25440	31721	1.51	0.0E+00	BE246780.1	EST_HUMAN	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12827	25448		1.55	0.0E+00	11528291	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12849	18338	31287	3.07	0.0E+00	4885312	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
12858	18346	31282	1.68	0.0E+00	6806878	NT	h188a08.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2879154 3'
12863	25466		2.17	0.0E+00	AB029900.1	NT	TCBAP1E4486 Pediatric pre-B cell acute lymphoblastic leukaemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP4486
							cDNA clone TCBAP4486
							Homo sapiens hypofibrinolytic protein FLJ20454 (FLJ20454), mRNA
							Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
							Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
							Homo sapiens GST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12802	25488	31733	2.53	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
12827	25884		3.32	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
12835	13682	26609	2.65	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12883	14499	27473	1.32	0.0E+00	6812457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
13018	25568		3.02	0.0E+00	7057020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
13051	25590	31685	1.36	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
13082	25613		1.63	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV8)
13103	14203	27158	1.4	0.0E+00	8888844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA

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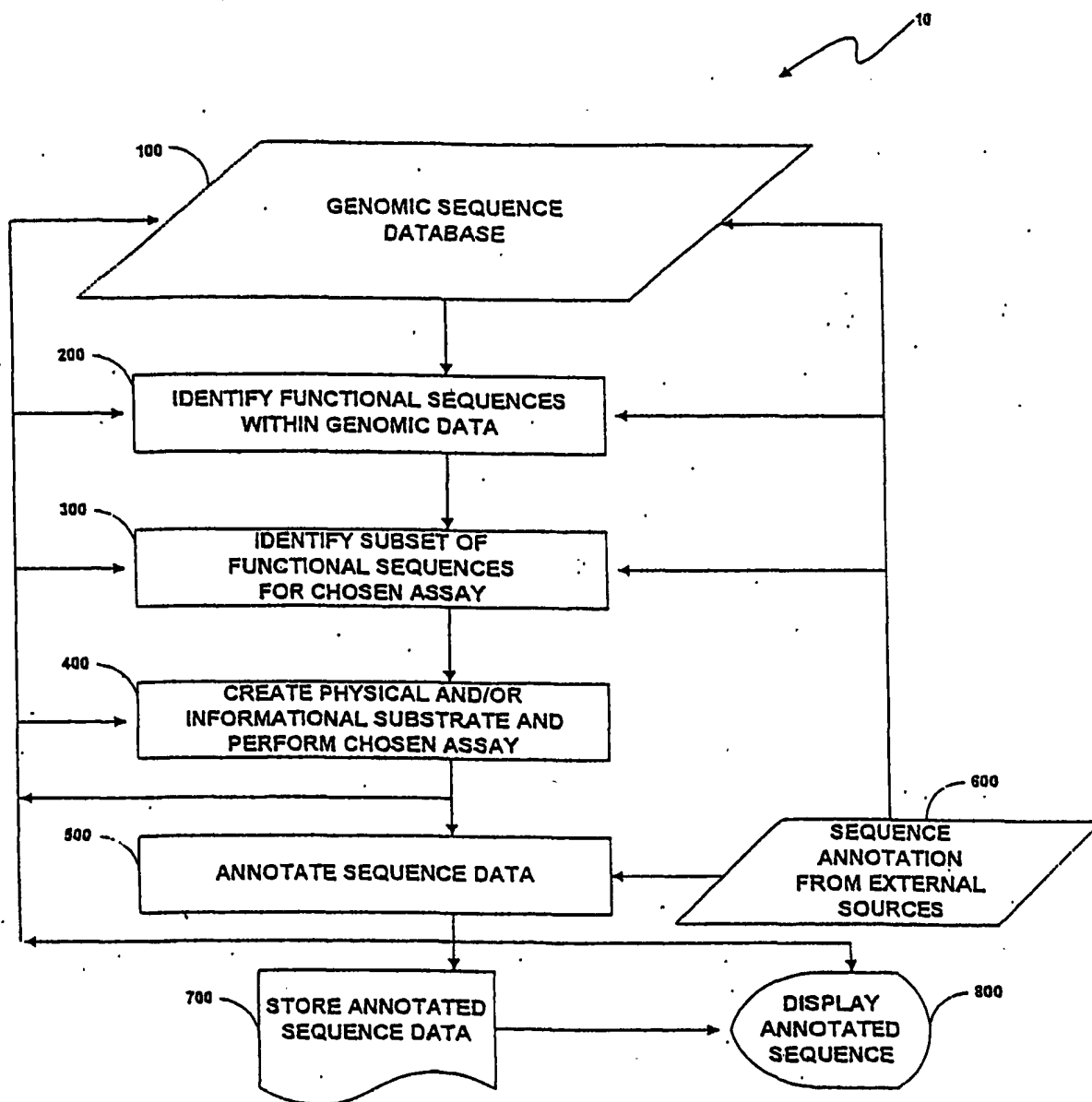


Fig. 1

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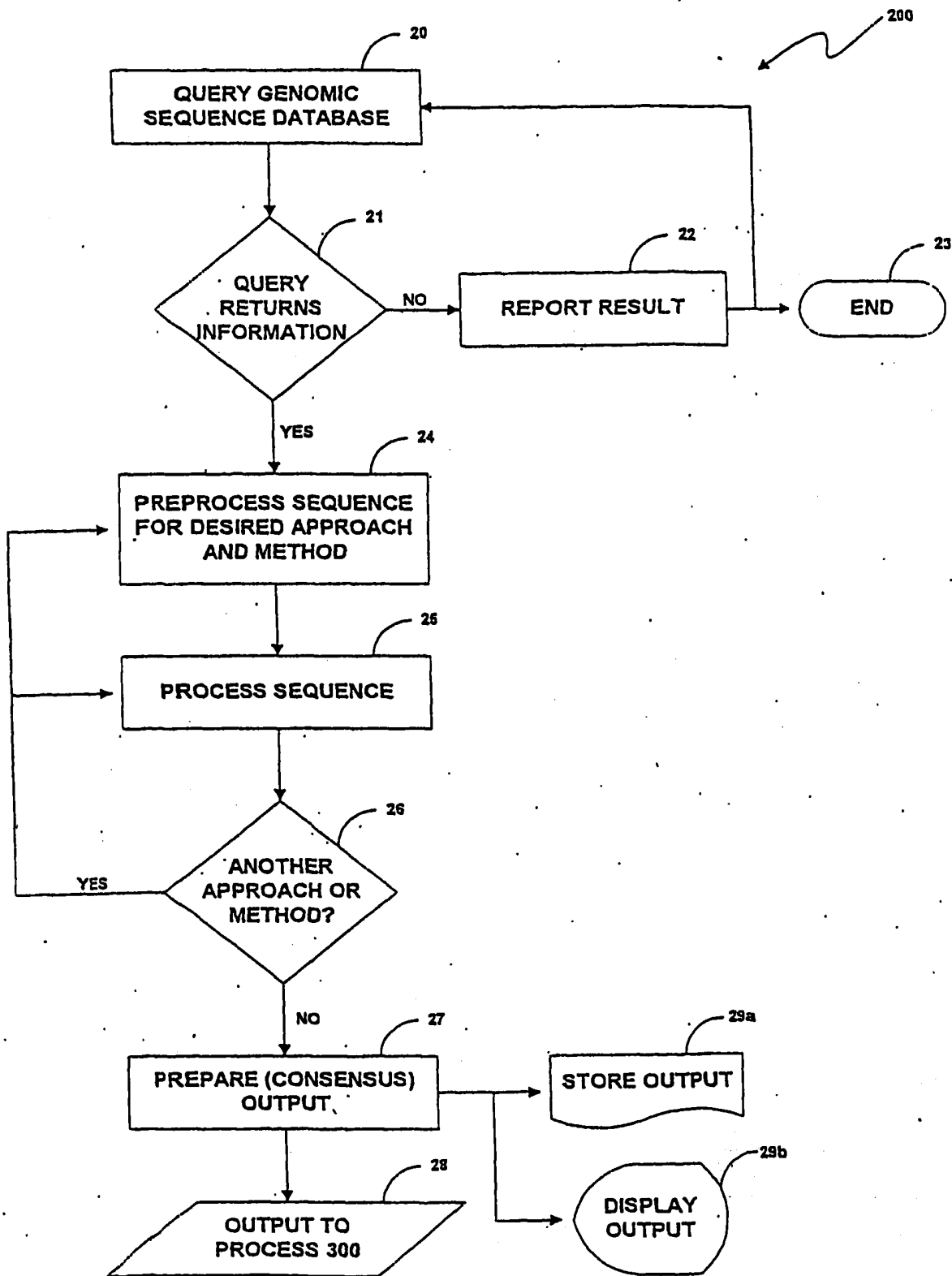


Fig. 2

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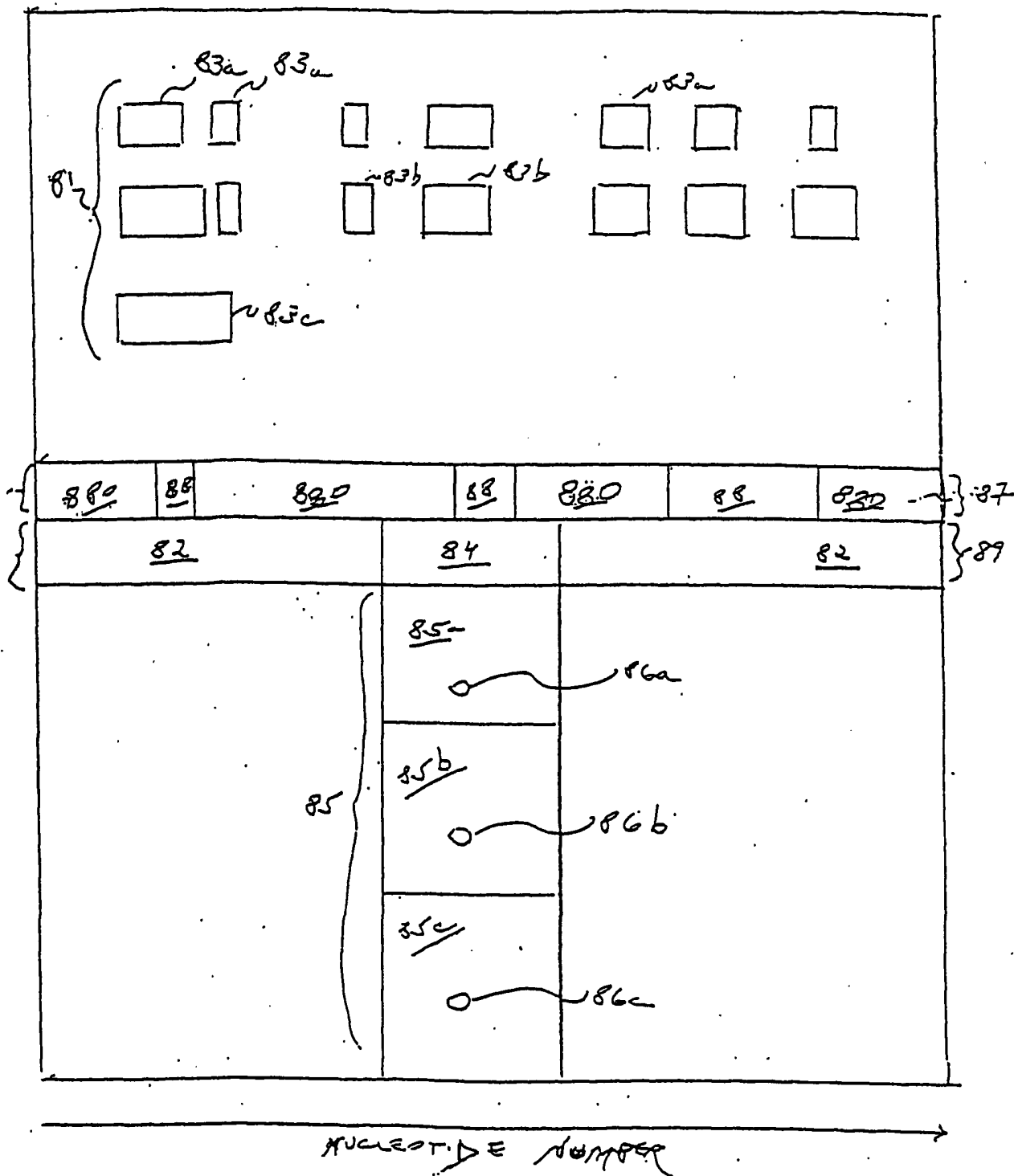


Fig. 3

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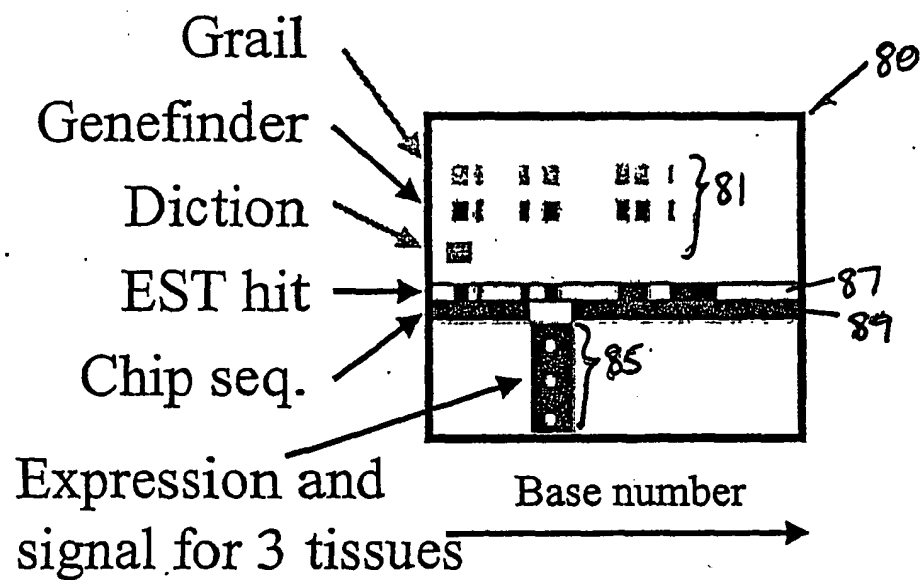


Fig. 4

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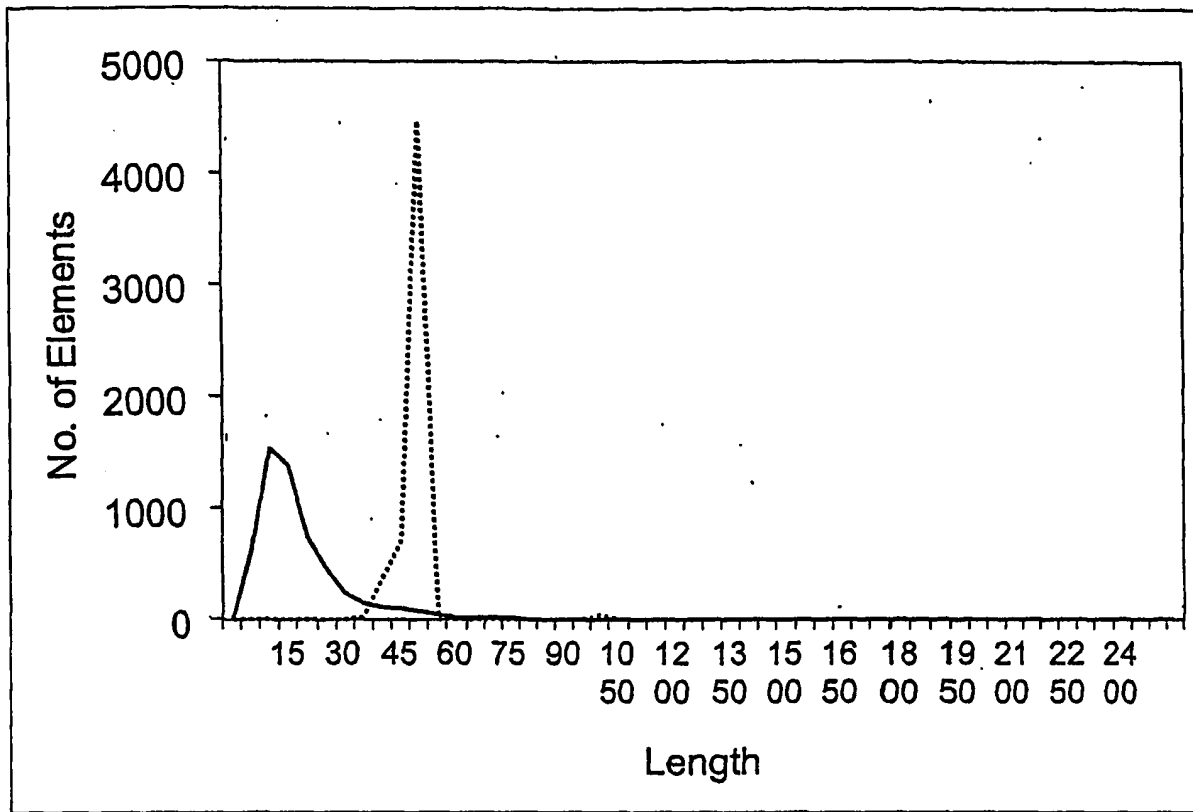


Fig. 5

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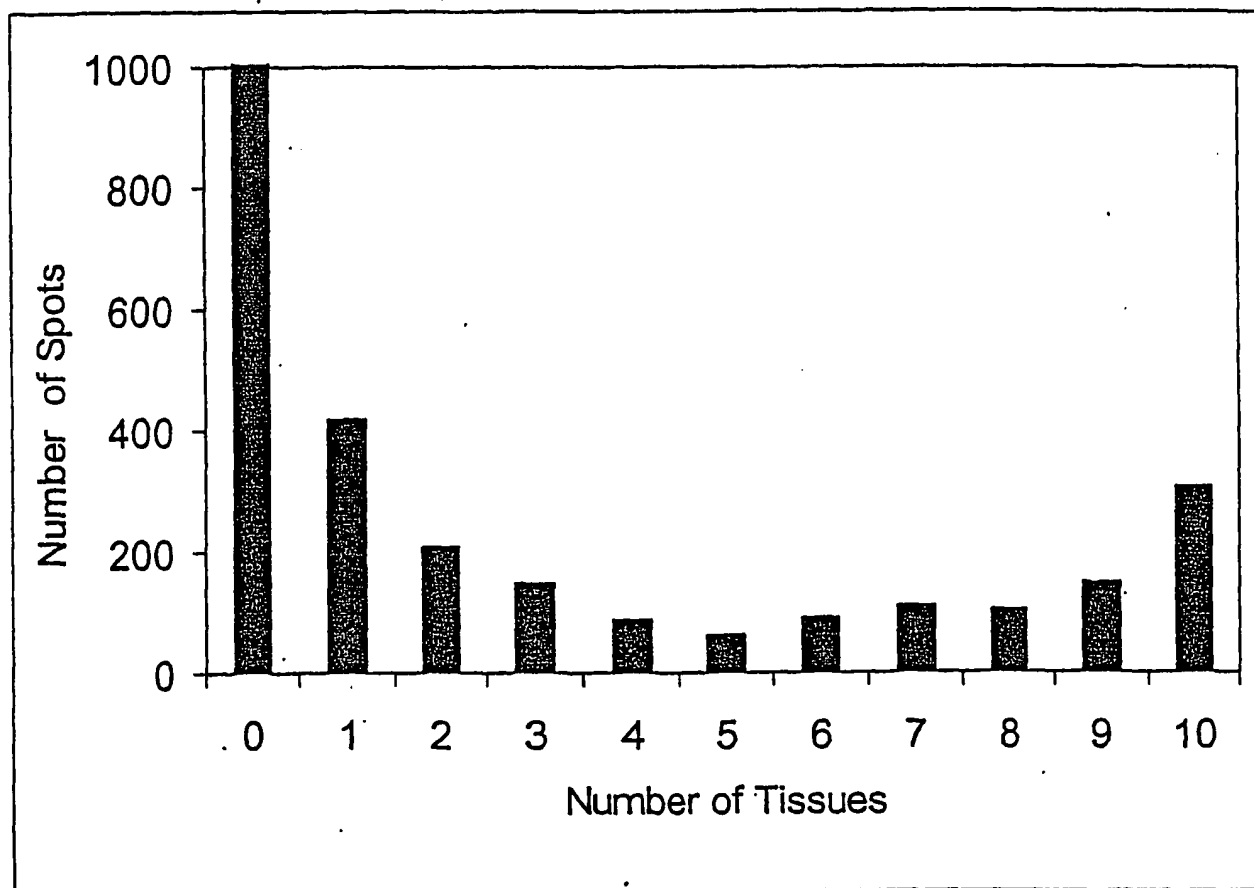


Fig. 6

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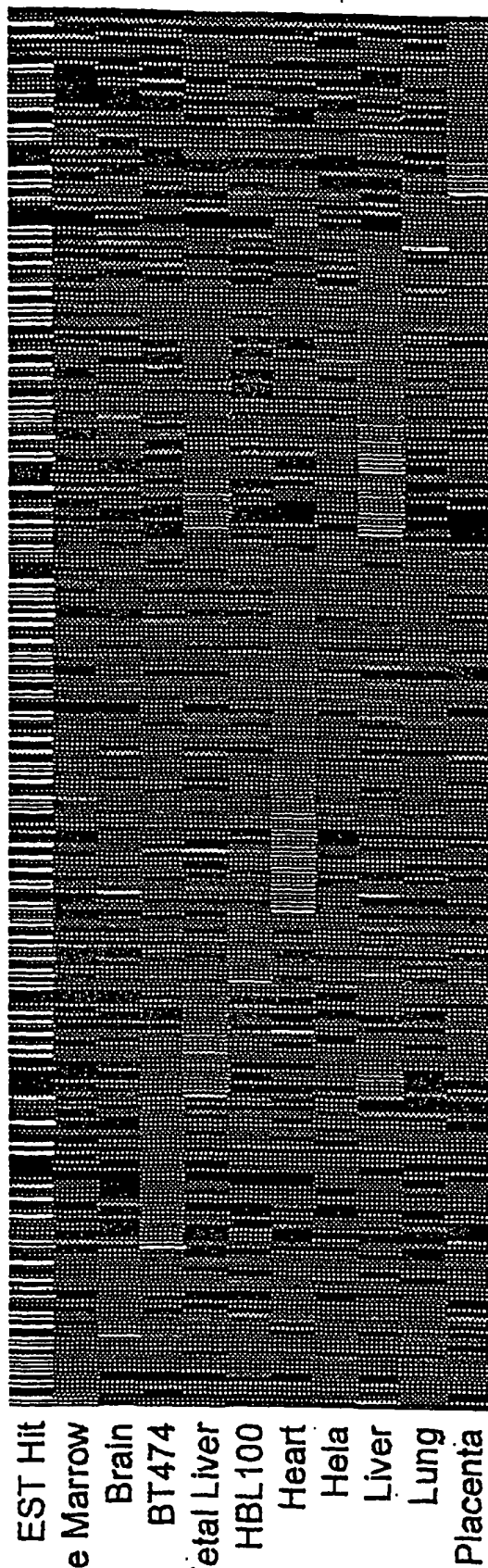


Fig. 7a

ratio legend

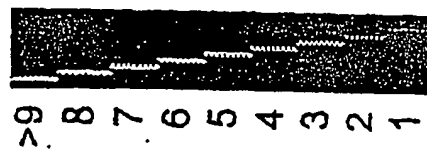


Fig. 7b

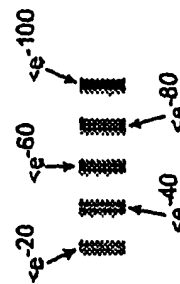


Fig. 7c

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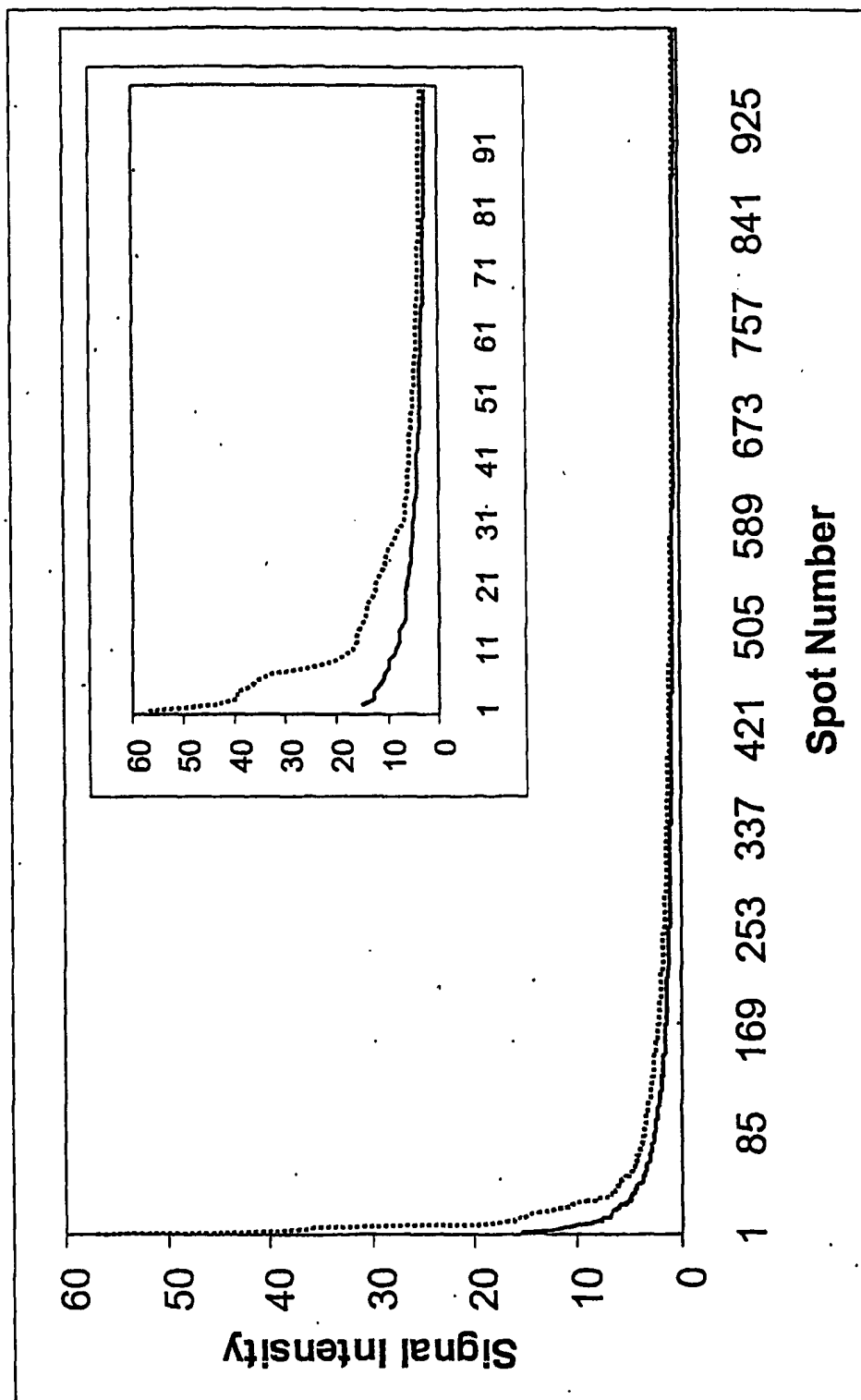


Fig. 8

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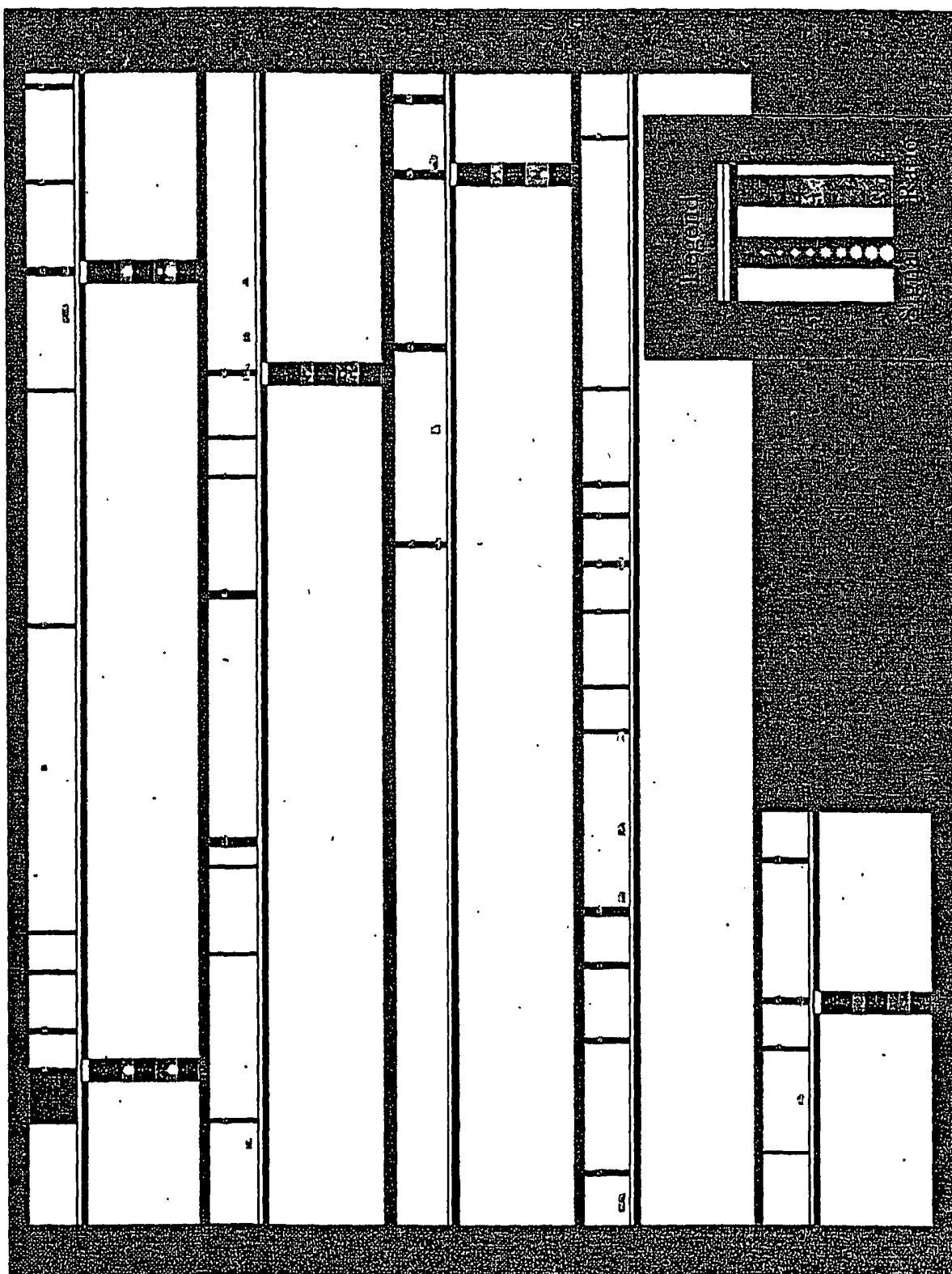
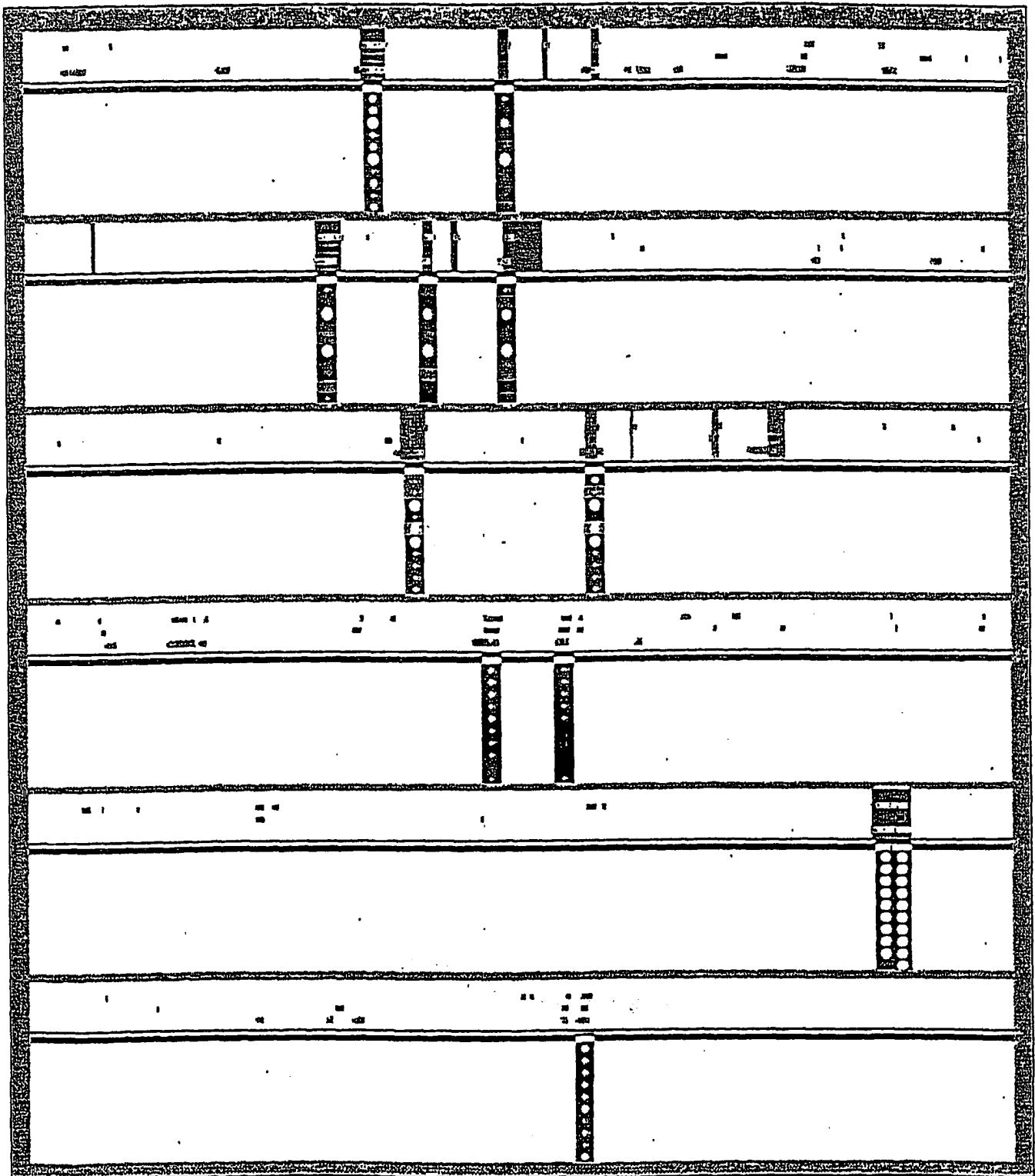


Fig. 9

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Fig. 10



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